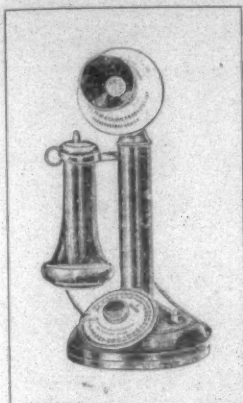


# SOUTHERN TEXTILE BULLETIN

VOLUME XIX.

CHARLOTTE, N. C., THURSDAY, JUNE 10, 1920

NUMBER 15



**EVERY** Textile Mill, small and large, has its problem of intercommunication.

The man who "grows up" with the business does not as a rule, recognize this fact as quickly as the one who comes in "new" on the scene.

The duties of a "good executive" increase every day because his loyalty to his firm creates new activities in their interests. Put into his hands an equipment that will give him complete and constant control of his organization.

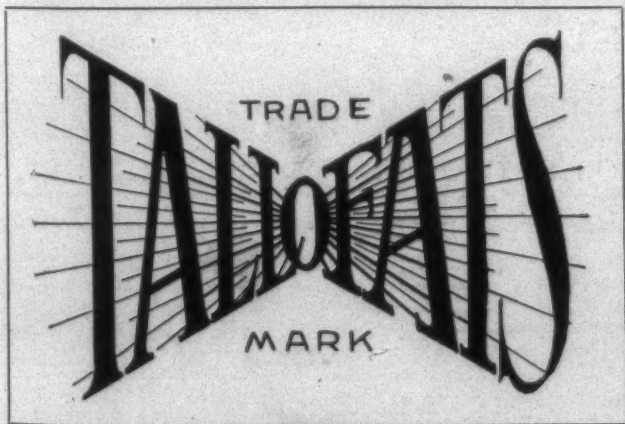
**Select-O-Phone**—Automatic, Interdepartmental Telephone and Man-Finding System places him within **FOUR SECONDS** of every man in his organization, no matter whether he is on his round of inspection or in his office.

Our Sales Engineer, **now in the South** will gladly explain and demonstrate, the many advantages of the Select-O-Phone Service over that of other telephone systems. He will also make a survey of your mill and submit plans for a system suitable to your individual requirements. There is no cost or obligation to you for this service.

Screw Machine Products Corporation, Providence, R. I.

I accept your offer for a 10-minute no-obligation demonstration of Select-O-Phone, Automatic Telephone and Call System.

My name is \_\_\_\_\_ Title \_\_\_\_\_  
Firm name \_\_\_\_\_  
Address \_\_\_\_\_



## For All Warp Sizing

will make your weaving run **BETTER**. Needs no other compound, oil

or tallow. Carries the starch into the yarn where it will not shed.

*Makes Stronger and Smoother Yarn Which Means More  
Production From The Looms*

**CHARLES R. ALLEN** MANUFACTURER  
DISTRIBUTOR **Charleston, S. C.**

## A Profitable Investment

Replace old Spindles  
by Installing  
Allen Ball Bearing Twister Spindles



without change of Rail,  
Bobbin or Drive and  
obtain;

Greater Production  
and  
Better Product

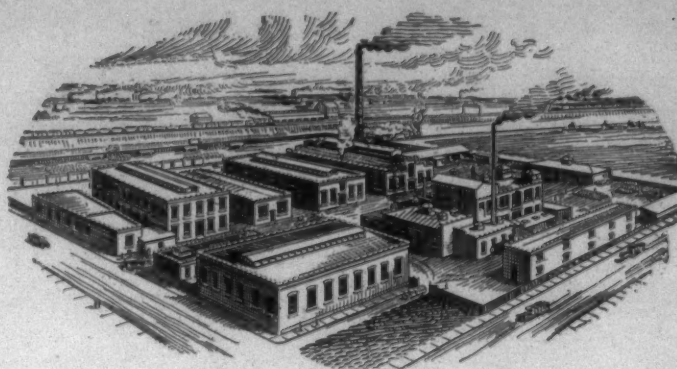
Uniform Twist in every Bobbin

**Allen Spindle Corporation**

80 Boylston St., Boston, Mass.

ELLIOTT A. ALLEN  
President

Inquiries Solicited



WORKS: NEWARK, N. J.

Since 1876 we have been engaged in serving  
the needs of dyestuff users.

Our Service Laboratories are ready at all  
times to match samples for you.

**DIRECT ACID CHROME  
BASIC  
DEVELOPED COLORS**

**John Campbell & Co.**

75 Hudson Street

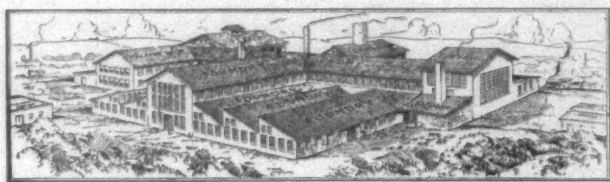
New York City

Boston,

Philadelphia,

Providence,

Toronto, Can.



MAKERS OF THE MOST SUCCESSFUL  
SHAKING GRATE IN THE SOUTH

Write us for information—

**McNaughton Manufacturing Company**  
Maryville, Tennessee

**Griswold Supply Company**

Successors To

**Georgia Supply Company**

Direct Mill Representatives

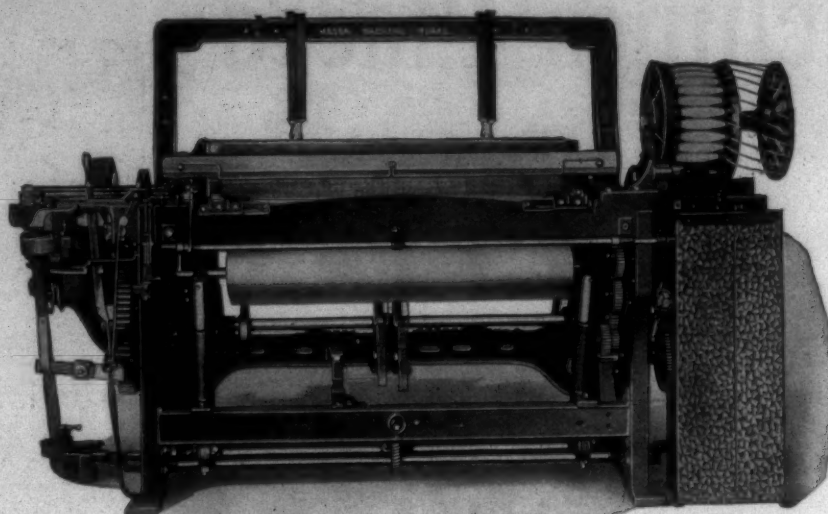
MACON

GEORGIA

## Cotton Twine Mill— For Sale!

3500 spindle Twine Mill. con-  
sisting of 12 acres land, 8 tenant  
houses, two-story brick building,  
two warehouses, engine and boiler  
rooms, dye plant. Mill now in  
operation. Write or wire for de-  
tail specifications. Being offered  
at an attractive price to close up  
an estate.

**The Jones Machinery Corporation**  
Atlanta Ga.



# **M A S O N**

---

## **Automatic Looms**

---

WITH BATTERY,  
WARP STOP MOTION,  
FEELER AND SHUTTLE LOCK

(Randolph Crompton's Patents)

**Fewer Parts**

**Standard Construction**

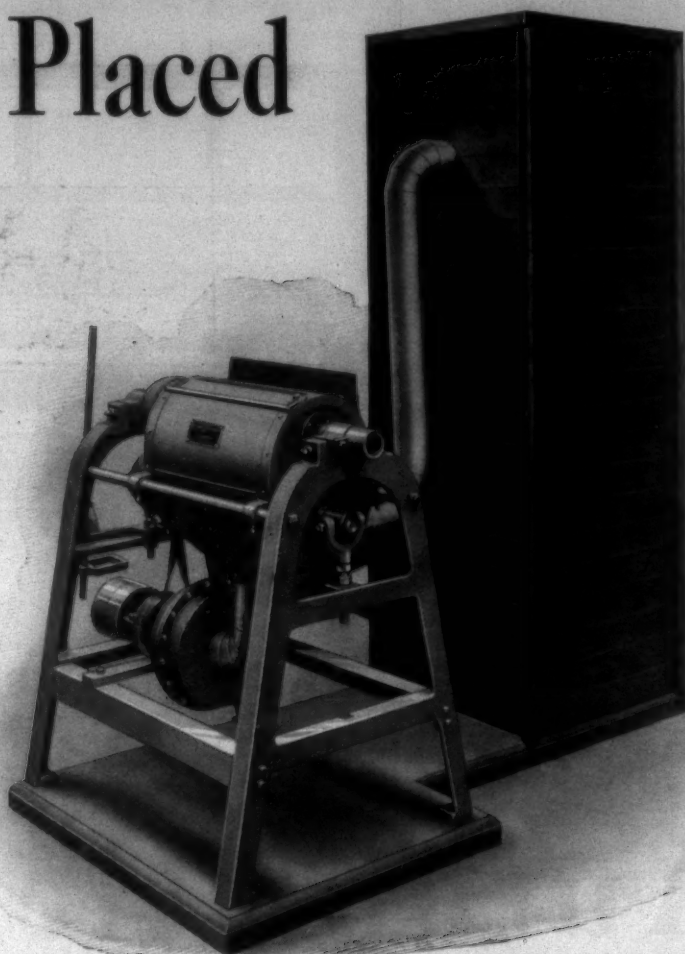
Rebounding Shuttles Overcome  
Damage to Shuttles and Bobbins Reduced

**Mason Machine Works**

TAUNTON, MASS.

**E. HOWARD, Southern Agent, GREENVILLE, S. C.**

# 96 Machines Placed In Southern Mills in 11 Months



**Monarch Bobbin Cleaner**

Monarch Cotton Mills, Union, S. C.....	2 machines
Eagle & Phenix Mills, Columbia, S. C.....	4 machines
Arcadia Mills, Spartanburg, S. C.....	1 machine
Chiquola Mfg. Co., Honea Path, S. C.....	1 machine
Orr Cotton Mills, Anderson, S. C.....	1 machine
<b>Victor-Monaghan Mills:</b>	
Greer Plant, Greer, S. C.....	1 machine
Victor Plant, Greer, S. C.....	2 machines
Ottaray Plant, Union, S. C.....	1 machine
Jonesville Plant, Jonesville, S. C.....	1 machine
Apalache Plant, Greer, S. C.....	1 machine
Seneca Plant, Seneca, S. C.....	1 machine
Monaghan Plant, Greenville, S. C.....	2 machines
Walhalla Plant, Walhalla, S. C.....	1 machine
Coosa Manufacturing Co., Piedmont, Ala...	2 machines
Inman Mills, Inman, S. C.....	1 machine
Griffin Mfg. Co., Griffin, Ga.....	1 machine
Lanett Cotton Mills, West Point, Ga.....	2 machines
Hartsville Cotton Mills, Hartsville, S. C...	1 machine
Greenwood Cotton Mills, Greenwood, S. C.	2 machines
Pacific Mills, Columbia, S. C.....	1 machine
Grendel Mills No. 2, Greenwood, S. C.....	1 machine
Lane Cotton Mills, New Orleans, La.....	1 machine
Belton Mills, Belton, S. C.....	3 machines
Marion Manufacturing Co., Marion, S. C...	1 machine
Dallas Manufacturing Co., Huntsville, Ala.	1 machine
South Texas Cotton Mills, Brenham, Texas	1 machine
Pelzer Mfg. Co., Pelzer, S. C.....	6 machines
Saxon Mills, Spartanburg, S. C.....	1 machine
Louisville Cotton Mills, Louisville, Ky....	1 machine
Springstein Mills, Chester, S. C.....	1 machine
Itasca Cotton Mills Co., Itasca, Texas.....	1 machine
Rosemary Mfg. Co., Roanoke Rapids, N. C.	1 machine

Mills Mill, Greenville, S. C.....	1 machine
Brandon Mills, Greenville, S. C.....	1 machine
Woodside Mills, Greenville, S. C.....	1 machine
Dunean Mills, Greenville, S. C.....	1 machine
Lockhart Mills, Lockhart, S. C.....	2 machines
Henrietta Mills, Caroleen, N. C.....	1 machine
Easley Cotton Mills, Easley, S. C.....	2 machines
Dixie Cotton Mills, LaGrange, Ga.....	1 machine
Thatcher Spinning Co., Chattanooga, Tenn	1 machine
Dillon Mills, Dillon, S. C.....	1 machine
Brookford Mills, Brookford, N. C.....	1 machine
Aragon Cotton Mills, Aragon, Ga.....	1 machine
Tucapau Mills, Tucapau, S. C.....	2 machines
Chadwick-Hoskins Co., Charlotte, N. C....	1 machine
Darlington Mfg. Co., Darlington, S. C.....	1 machine
The Trion Co., Trion, Ga.....	1 machine
The Virginia Cotton Mills, Graham, N. C.	1 machine
Edna Cotton Mills, Reidsville, N. C.....	1 machine
Wearwell Mills, Draper, N. C.....	1 machine
The Borden Mfg. Co., Goldsboro, N. C....	2 machines
Unity Spinning Mills, LaGrange, Georgia	1 machine
Lancaster Sotton Mills, Lancaster, S. C.....	2 machines
Wamsutta Mills, New Bedford, Mass.....	1 machine
Warren Mfg. Co., Warrenville, S. C.....	1 machine
John P. King Mfg. Co., Augusta, Ga.....	2 machines
Meritas Mills, Columbus, Ga.....	1 machine
Mobile Cotton Mills, Mobile, Ala.....	1 machine
McComb Cotton Mills, McComb, Miss.....	1 machine
Selmo Cotton Mills, Silma, N. C.....	1 machine
The Grendel Mills No. 1, Greenwood, S. C...	1 machine
Knoxville Cotton Mills, Knoxville, Tenn...	1 machine
Blue Buckle Cotton Mills, Rock Hills, S. C...	1 machine
Arcade Cotton Mills, Rock Hill, S. C.....	1 machine
Pacific Mills, Columbia, S. C.....	5 machines

*WRITE FOR PARTICULARS*

**Monarch Bobbin Cleaner Co.**  
Union, South Carolina

Thursday, June 10, 1920.

SOUTHERN TEXTILE BULLETIN

6

## NO GUARANTEE REQUIRED FOR STANDARDIZED TRANSMISSION EQUIPMENT

ORDER NO. 790  
HARLEY-DAVIDSON MOTOR COMPANY  
3716-3732 CHESTNUT ST.  
MILWAUKEE, WIS.  
C.A. Biebler  
38 - 1 5/16" x 1 1/4" Hyatt Bearing Hangers  
19 - 1 5/16" x 1 1/4" Hyatt Bearing & Hanger  
This is on a 5 yrs guarantee  
ACKNOWLEDGE RECEIPT OF THE ORDER  
AND ADVISE DATE OF SHIPMENT  
NOTE ORDER NUMBER - BILL - PACKAGE

ORDER NO. C 27605  
HARLEY-DAVIDSON MOTOR COMPANY  
3702-3800 CHESTNUT STREET  
MILWAUKEE, WIS. 11/14/19  
C.A. Biebler  
City  
PLEASE SHIP US THE FOLLOWING MATERIAL VIA  
144 14" Universal Hangers.  
144 1 15/16" Hyatt Hanger Bearings.  
50 1 15/16" Shaft Couplings.  
25 1 15/16" Shaft Collars.  
Dept 36  
FOR RECEIPT OF THIS ORDER AND ADVISE DATE OF SHIPMENT.  
BILL AND PACKAGE.  
A. J. Gray

On October 6, 1909, when Hyatt Roller Bearing Hangers were not so well known, it was necessary to make a five year guarantee in order to obtain an order for Hyatt Roller Bearing Hangers from the Harley-Davidson Company.

But, on November 14, 1919, when Hyatt Roller Bearing Hangers had become widely known for their durability and dependability, there was no mention of a guarantee on a repeat order from this company.

Because of the ten years of reliable, economical operation received from their first Hyatt Roller Bearing Hangers, the

Harley-Davidson Motor Company looks upon them as a product which needs no guarantee. Hyatt Roller Bearing Hangers stand on their own merits—savings in power and lubrication costs, their positive self-oiling feature and their length of life (29 years in some plants). These merits make Hyatt Roller Bearing Hangers—standardized transmission equipment.

Transmission engineers who specify Hyatt Roller Bearing Hangers can make sure of this same reliable, economical operation. Write for our bulletin No. 125 and investigate the many advantages of Hyatt Roller Bearing Hangers.

MOTOR BEARINGS DIVISION  
DETROIT, MICHIGAN

HYATT ROLLER BEARING COMPANY  
INDUSTRIAL BEARINGS DIVISION  
NEW YORK, N. Y.

TRACTOR BEARINGS DIVISION  
CHICAGO, ILLINOIS

# Hyatt Bearings For Line Shafts

# Aladdin



## "Excellent Satisfaction" — The Cleveland-Cliffs Iron Co.

Aladdin Read-Cut Houses universally gives satisfaction. The most difficult industrial housing problem can be simplified and solved by the Aladdin method and without the slightest slip or hitch.

It is customary in the Logan Field for the mining company to furnish housing for the employees. Therefore at the Ethel Mines, the Cleveland-Cliffs Iron Company had the usual precedent to follow. Their housing problems were solved with Aladdin Read-Cut Houses, regarding which they write,

*"We shall be pleased to have you use our name as reference, as the houses which we have already purchased from you have given us very excellent satisfaction. As our operations expand more houses will be necessary."*

This is but one of the many instances where the Aladdin service has solved the housing problem. Better houses, lower in price, more quickly erected, these are the expressions of satisfaction we hear from every customer.

## The Aladdin Co.

## Aladdin —

- expedites your building project—
- houses your men well and quickly—
- saves 18% of the cost of lumber—
- saves 30% of the labor cost—
- reduces the skilled labor required—
- guarantees complete shipment of material—
- guarantees the quality—
- carries material for 1,000 houses in stock—
- ships from the nearest timber region—
- quotes definite prices on any order from one house up to a city of 3,000, including churches, schools, offices, water and sewage systems, electric plants, street and house lights, heating plants, street parks, trees, lawns, etc., complete.

Write, Wire or Phone for Aladdin Catalogue No. 1840

Offices and  
Mills at

Bay City, Michigan  
Wilmington, North Carolina  
Hattiesburg, Mississippi  
Portland, Oregon  
Toronto, Canada



# Industrial Housing

# SOUTHERN TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 39-41 S. CHURCH ST., CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MAR. 3, 1879

VOL. XIX.

CHARLOTTE, N. C., THURSDAY, JUNE 10, 1920

NUMBER 15

## Modern Knitting Mill Design

An address before recent convention of National Association of Hosiery and Underwear Manufacturers at Philadelphia, by Gen. W. H. Rose, District Manager Lockwood, Greene & Co., Engineers, 101 Park Avenue, New York, N. Y.)

All industry becomes more exacting as it develops. Among other things, it requires better plants than were formerly found necessary. In no other industry has this need for better plants been more pronounced than in the knit goods industry. The public demands a better article than it did in past years, and factories must be designed to meet the demand for better goods in larger quantities.

A modern knitting mill should be thought out in advance, before any actual construction begins or machinery is purchased. Before the land is bought for a new plant, if practicable, outlines of departments and buildings should be made, and machinery layouts determined, to insure economical routing and handling of materials.

It is important that the buildings should lie on the ground correctly, at a proper elevation, with best arrangements for drainage, railway sidings, light, etc. It seems almost trite to mention those and many of the things I shall say this morning, yet in a large number of plants such considerations have evidently been ignored. Very frequently a mill executive will buy his land first, sometimes order his machinery, and occasionally even build his building without first thinking his scheme through to the end.

In addition to the studies of layouts previously mentioned, a modern knitting mill must be planned with particular attention to light, both natural and artificial. Good lighting is demanded by operators, and pays from an operating standpoint. Improvement in lamps and distribution of light are among the notable developments in engineering in the past few years.

A modern plant should be adequately equipped against fire loss. It should be structurally modern, rigid and strong, with wide column spacing, high ceiling and sufficient exits. Care must be given to sanitation and to the comfort of employees. The time is past when operatives can be crowded into badly lighted, poorly ventilated rooms. The modern knitting mill is bright, attractive, clean. A little attention and often very slight additional expense, will give a pleasing attracts help and is good publicity, but is a genuine delight to the

owner.

The last few years have shown a marked tendency to go to the use of reinforced concrete construction for knit goods plants. The advantages of this type of construction are almost too well-known to require mentioning here. Among these advantages, of course, are more permanent construction, smaller maintenance charges, lower insurance rates, increased daylight, greater stiffness and rigidity, which carries with it the possibilities of placing heavy machinery and even a dye house on upper floors. There is also a marked tendency at the present time to go to the use of much wider buildings than were formerly thought possible.

Knitting mills constructed a few years ago were thought to be as wide as practical when constructed in widths of fifty to sixty feet. Modern knitting mills, however, are readily constructed with widths of eighty-five, ninety, and even one hundred feet, and by the use of thoroughly modern methods, are made even lighter at the center, for the use of machinery, than was the case of the narrow mills which were formerly used.

In the construction of mills for the manufacture of full-fashioned hosiery, the earlier mills were usually built of slow-burning or mill construction and were usually constructed of a width suitable to take one row of machinery set crosswise of the building, giving an over-all width of forty-two to forty-five feet. Also in these earlier mills, on account of heavy machinery and the vibration from it, the usual arrangement was to put these machines in the lower stories. Modern methods of construction make it easily possible to construct these mills of sufficient width to take a double row of machines, which require an over-all width of eighty-five to ninety feet. The use of concrete construction with its added stiffness makes it possible to consider the placing of full-fashioned hosiery machinery on the fifth, sixth or seventh floors, as the occasion may require, without particular regard for the question of vibration.

The use of concrete has also made it possible to consider in many cases what seems to be a logical provision for the location of the dye house or washing and bleaching

department on the top floor. Until very recently this has not been considered a practical thing in a mill constructed building, although we have known of an instance where a dye house was installed on the fourth floor of a mill constructed building, with subsequent processes located in the lower floors. In this case the joints of the floor were caulked in very much the same manner as the seams of a boat. We would not recommend this general method, however, as a regular practice, to place the dye house in the upper floor in a mill constructed building, but in concrete this not only becomes relatively simple but also for reasons of arrangement and routing becomes a desirable thing to do.

In the manufacture of hosiery and underwear, as in most other lines today, manufacturers are becoming alive to the possibilities of improved production through most careful study and proper consideration of their problem before new building layouts are made and studied, and while it is not uncommon today for new knitting mills to be entirely laid out in every detail with all departments and machines located before construction is started, this is a situation which has come up very recently and would not have been thought necessary a few years ago.

Today the manufacturer who would erect a building without a very definite idea of how he would use each and every floor, and where the departments would be located, would be considered lacking in foresight.

### Routing and Relative Arrangements of Departments.

There is nothing particularly complicated about the arrangement of departments in a knitting mill, and, given a complete new plant to consider, it becomes a very simple matter to arrange departments properly and to have the routing so that the minimum amount of traveling will be required for the goods. When, however, the problem, as is more often the case, becomes one of extending an old plant and enlarging all the departments, with some to be located in a new building and some to remain in the old building, then the situation requires much more careful study, and it is in these cases that the proper amount of study will promise the greatest

possible return on such an investment of time given to making preliminary playouts.

Most knit goods plants start manufacturing processes with the delivery of the yarn to the winding and knitting departments. In a few instances, which are, however, in the minority, knitting plants have their own yarn mills. In these cases, however, they are usually located in separate buildings and so the layout of the knitting mill in these cases becomes almost exactly the same kind of problem as when the manufacturer buys his yarn.

The work of the average knitting mill leaves off when the finished goods are loaded out of the shipping room, and therefore it is easy to see that the arrangement of an ideal knitting plant would be one in which the yarn on receipt at the plant would be taken to the top floor for winding and knitting and then carried on through the subsequent processes, traveling down from floor to floor in its progress through the mill, and finally landing on the ground floor, where finished goods, storage, packing and shipping could be located. Several modern knitting mills have been laid out on this basis and a good example of such a mill is the underwear mill of the Black Cat Textile Company, at Bennington, Vt.

As the work of the dye house in the knitting mill usually follows closely after the knitting processes and is followed by many finishing processes, it will be seen that the arrangement above referred to will necessarily bring the dye house to or near the top of the mill, and if the mill is properly constructed of reinforced concrete, this becomes easily possible and will be discussed further under detailed requirements for dye houses.

The machinery used in knitting mills is in the form of relatively small light machines which are capable of arrangement in almost any kind of space, but here again it is of advantage to study the proper column spacing, so that the layouts may be made in the several departments with minimum interference of columns and maximum economy of arrangement. Generally speaking, it will be found proper to locate practically all the machines in rows running crosswise of the mill. In

(Continued on Page 31.)

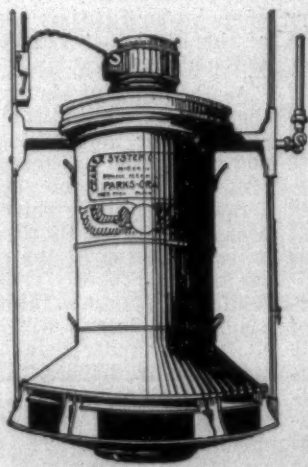


## Buying "Humidifiers Plus"

Our particular aim is not to sell humidifiers, but HUMIDIFICATION

*There's a big difference*

It's been a comparatively easy matter to sell humidifiers. Mysterious looking contrivances could be stuck up in a more or less haphazard way at different points in the room. That conditions were improved in some cases was due, not to any inherent efficiency in the systems themselves, but to the desperate need for moisture in the atmosphere in the rooms where they were placed.



Parks-Cramer High Duty Humidifiers. Most capacity per dollar of investment

Every Parks-Cramer installation is scientific. The guesswork of old humidifier practice has given way to KNOWLEDGE. It is now possible to get exactly the humidification required, regardless of the time of day—or year, the location of the mill, the peculiarities of construction or what not

Many a mill man who has replaced his old "rule-o'-thumb" system with a Parks-Cramer system has been astounded at the results.

**Parks-Cramer Company**  
*Engineers & Contractors*  
*Industrial Piping and Air Conditioning*  
**Fitchburg      Boston      Charlotte**



Parks-Cramer Automatic Humidity Regulator, the regulator that makes modern humidifiers your partner.

### Claffins Issue Statement on Merchandise Scarcity—Not Hopeful for Lower Prices.

The scarcity of desirable merchandise is emphasized in a letter sent out by Claffin's, Incorporated, intimating very clearly that prospects did not make them very hopeful for lower prices. Considerable stress is laid on the comment regarding the goods scarcity, and every effort has apparently been made to indicate that there is no immediate likelihood of relief in this respect. "The supply of goods is very much under a normal demand, and the limited supply is not being increased." Claffin's, Incorporated, go further and take steps to make sure that the reader does not feel they have exaggerated this statement—that it is not the result of hearsay.

The statement by Claffin's, Incorporated, follows:

"In the matter of merchandise from this house, we take this occasion to restate our policy with our retail friends, i. e., that your order will be filled and shipped at the lowest price prevailing with us on the date of shipment. The price on every item will be gone over carefully, and if there is a lower price on it, you will get the benefit.

"Our own view of the immediate business situation is that wide comment on department store drives, strikes, embargoes, high interest rates, etc., do not increase production. The condition of your stock and our own confirms the fact that there is no menacing accumulation of merchandise in regular chan-

nels.

"We believe the banks are taking a prudent course in curtailment of credit to those who have speculated in merchandise at the expense and to the great injury of their customers, and more particularly in curbing those irregular and irresponsible factors who have come into trade in the past few years of rising prices and great financial strain.

"It is not conceivable that our Government, through its banking system, will become a party to denying legitimate credit to established concerns doing business with reputable houses that have not speculated. The process of credit restriction we are now witnessing is similar to the one every experienced merchant has applied to his merchandise stocks ever since it became apparent that abnormally high costs of production could not be controlled.

"It is a time for the conservative merchant to become a bulwark in his own community against mischievous agitation and to stand forward for just dealings in business.

"Before entering upon a new season, it is customary to look for some readjustment, some leveling of prices. At this time, we cannot see any signs of accumulations of products in mill centers or mill agencies. Any adjustment made on any basis other than supply and demand will not be lasting, and efforts to circumvent this old business law cannot be wholesome.

"Most of the merchandise, sold by us for fall was distributed on an allotment basis. We could not avoid

this. We could have sold a great many more goods than we did, but could not get them. Despite all we could do in markets at home and abroad, we were forced to be content with what we considered meager assortments for customers' requirements. Mills cannot give us additional goods now, and will not take new orders for delivery within a reasonable time. They are sold far ahead on dependable staple merchandise. We have hoped, as you have hoped, that there would be some substantial price changes. If any are made before the summer is over, we are not yet able to see whence we can count upon more goods.

"Goods are scarce on account of reduced production, and the best information we can get leads us to believe that the conditions will continue for the balance of this year. In expressing our belief in this estimate of conditions as they now appear we need only say that we have been trying constantly to buy any goods of our kind that are offered, and that we are constantly driving at the mills to hasten along goods that are due us.

"Being on the ground here in this great center of finance, merchandising and trade, and being constantly mindful of the dangers that lie in attaching too much importance to cursory and mercurial opinions of trade advanced in interviews and elsewhere, we wish to say that actual yardage of goods in mill hands and jobbing houses are ridiculously low, and that we are now on the threshold of the season when pro-

duction runs light because of factory workers' vacations. The supply of goods is very much under a normal demand, and the limited supply is not being increased."—Daily News Record.

### Storage of Coal.

Tests conducted by the Bureau of Mines lead to the following conclusions regarding the storage of any bituminous coal:

1. Piles not to be over 12 feet deep, and no part of the interior to be over 10 feet from the surface.
2. Store only screened lump coal—if possible.
3. Keep out dust as much as possible, and to do this avoid handling.
4. Have lump and fine evenly distributed. Do not let lumps roll to the bottom and form air passages.
5. Rehandle the screenings after two months, if possible.
6. Store away from any sources of even moderate heat and well away from the main buildings of the plant; never against a frame building.
7. Allow six weeks seasoning after mining before putting into storage piles.
8. Avoid alternate wetting and drying.
9. Avoid admission of air to the interior of the pile through interstices around timbers, irregular brickwork or a porous bottom, such as coarse cinders.
10. If wet coal is received, dump in small piles around the edges, where air can get to it freely to carry away moisture, and where other coal will not be packed on top of it.

**For BETTER CONSTRUCTION and BIGGER PRODUCTION Use**

## Staley's Textile Starches

**Natural or Modified**

*Each Grade of Starch is Separately Prepared to Meet Your Particular Operating Requirements in*

## Sizing and Finishing

**YOUR ORDER is OUR OPPORTUNITY**

**for INTELLIGENT SERVICE and  
MUTUAL BUSINESS GROWTH**

*We Are Serving Others, May We Serve You?*

**A. E. Staley Manufacturing Company**  
**Decatur, Illinois**

# New System of Heating for Cotton Mills

Building superintendents and heating engineers will be interested in this new piping layout for a heating system which provided a Closed Loop circuit, whereby the water of condensation from the radiators is returned directly into the boiler. The radiators are kept free from air and water and the system will work satisfactorily on any pressure. That is to say, high, low or variable pressure and provides an ideal heating condition at all times.

This system which has been perfected by the Farnsworth Company, Conshohocken, Penna., is possible by reason of the chief features of the Duplex Boiler Feeder which permits a continuous flow of condensation into the boiler. The condensation is held under pressure and delivered into the boiler at a temperature only one or two degrees below the temperature of the steam, corresponding to the pressure carried on the heating system, and these results are obtained without the use of a Receiving Tank. There are no vents open to the atmosphere and practically no heat loss.

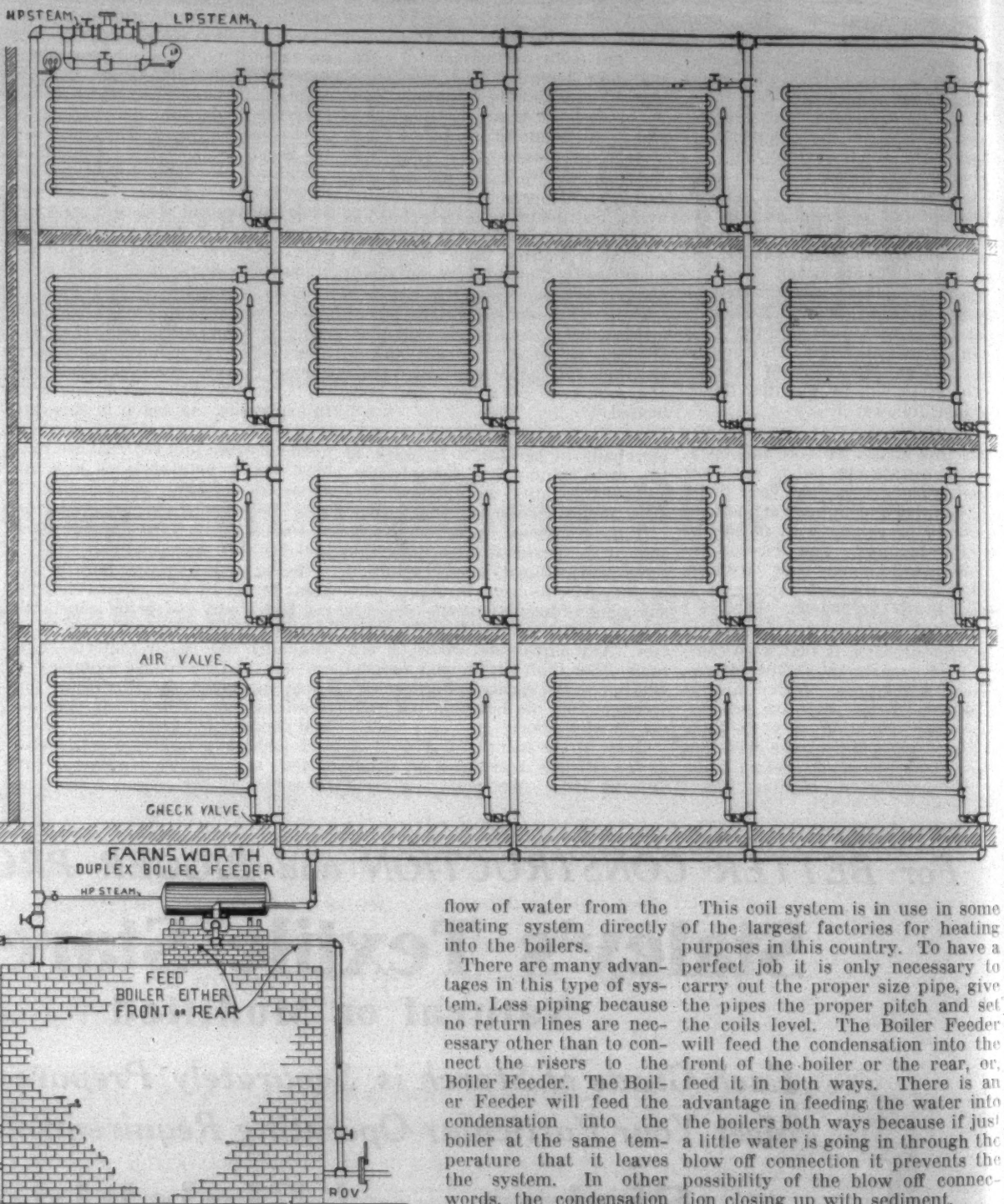
When the high pressure steam from the boiler is carried to the top of the building steam passes through a reducing valve and then the risers drop from the main line to supply the various coils. The hangers supporting the coils are so arranged to give free expansion and contraction of the riser from the coil.

The return line of the coil is carried back into the riser with a drop of 9 inches before entering the riser with a check valve. By this static head of 9 inches all water between the check valve and the lowest pipe of the coil is sufficient to lift the check valve and permit the condensation to the coil to flow back into the same steam riser.

A full size pipe is carried from the return pipe of the coil to somewhere near the top of the coil where an automatic air valve is inserted. This full size pipe provides a sort of an air chamber and eliminates the possibility of any water squirting out of the air valve which is so very often experienced where coils are used.

To make this job work properly the proper distribution of steam supply pipes to the coils and the proper size of risers should be used. In other words, it is advisable to use about the same proportions in piping these coils as would be used on the common one pipe radiator or system.

The return pipe from all of the worth Duplex Boiler Feeder which



flow of water from the heating system directly into the boilers.

There are many advantages in this type of system. Less piping because no return lines are necessary other than to connect the risers to the Boiler Feeder. The Boiler Feeder will feed the condensation into the boiler at the same temperature that it leaves the system. In other words, the condensation is held under a pressure and fed directly into the boiler.

For illustration, if one pound is carried on the system the water would be fed into the boiler at 242 degrees, if 5 lbs. was carried on the system it would be about 225 degrees, and if 10 lbs. about 240 and if 50 lbs. about 300, and so on up. This type of system will circulate freely on atmospheric pressure or any pressure that may be desired.

This coil system is in use in some of the largest factories for heating purposes in this country. To have a perfect job it is only necessary to carry out the proper size pipe, give the pipes the proper pitch and set the coils level. The Boiler Feeder will feed the condensation into the boilers both ways because if just a little water is going in through the blow off connection it prevents the possibility of the blow off connection closing up with sediment.

The writer in his travels noticed in a number of the big plants that a small feed line is carried into the blow off so that a small portion of the water is going into the blow off connections and it is claimed that they keep the blow off lines free.

Hundreds of large plants are feeding all of the water into boilers through the blow off connections as a great many engineers believe that

(Continued on Page 34.)

IF ITS A TOOL WE'VE GOT IT

## PASCO TOOL COMPANY

### SMALL TOOLS AND SHOP SUPPLIES

10 North Broad Street

ATLANTA, GA.

LARGEST EXCLUSIVE TOOL STORE IN THE SOUTH

### John V. Farwell Discusses Shortage of Desirable Merchandise in Cottons.

The Chicago Tribune prints the following interview with John V. Farwell, in which the shortage of merchandise is again featured:

"What is the outlook in prices?" John V. Farwell was asked yesterday.

"Let me give you an ocular demonstration," he replied, as he led the way up to the counting room of his establishment to the second floor, where he called a department manager.

"Got any wide sheetings or bed sheets?" he asked.

"Hardly any," was the reply, "Just a few odd widths."

"Any percales?" he asked.

"About five pieces."

"How many should you have now?"

"Two hundred cases or more."

"Up on the third floor he asked:

"Any ginghams?"

"Here are about 65 cases going on sale in June," the manager said.

"How many should you have?"

"Three or four hundred."

"What is the trouble?"

"Can't get anything from the mills."

Mr. Farwell called for a photograph of the storerooms of the Everett Mills, one of the greatest gingham manufacturers in the country, showing rows and rows of empty tables which should be stocked. The mill representative had shown it in proof that he could not fill orders.

"That's the situation in a nutshell," said Mr. Farwell. "We have

the lowest stock of domestic cotton we have had in years. We should have \$200,000 or \$300,000 percales in stock. We can't get them. The mills can't make them fast enough.

"The question is how is the retail merchant going to do a safe business and help credit conditions by cutting his price on these goods now? How can he replace them? It can't be done. In such necessities it is economically unsound to give a general price reduction, for such goods cannot be replaced for some time."

"I think this wave of 20 per cent and 30 per cent price slashing is about over."

"It was started as an advertisement feature. It is unsound. The Chicago merchants of the better class are not doing this. They are good merchants and know that it should not be done. What they should do, and are doing, is to hold seasonable clearance sales, getting stuff out of the way that moves slowly at this time of the year, odd lots, changes in styles, etc."

"It is better for a merchant to cut 50 per cent on certain kinds of goods to get them out of the way and permit him to restock with the things that are in demand."

"Take rugs. We cannot get them. In woolen goods for fall we have already done the largest business in our history. We have the goods on contract and have sold them for future delivery, but they are coming forward slowly."

"Then, in general, he was asked, 'you think that there is no chance of a reduction in prices?'"

"In the things of which I have spoken the mills state emphatically there will be no reduction in prices. Retailers cannot replace such goods at all just now. They have bought standard goods for fall delivery at lower prices than prevail now."

"In silks there has been a reduction. That is the only item I can think of. That was due to an inflated price built up by speculation in Japan. But that does not help much. The people do not have to worry about silk shirts. I never wore one in my life, but cotton and cotton goods are another matter. We all want them."

"Of course, it is impossible to say what will happen to fancy goods and luxuries. I have given you the situation in the staple necessities in dry goods."

### "Old Slater Mill" Will Become Textile Museum.

Pawtucket, R. I., June 2.—The "Old Slater Mill," the birthplace of the cotton textile industry in America, is to be preserved as a show place and a museum for textile machinery. A committee of manufacturers has taken title to the property and later will turn it over to the city or to a permanent memorial association.

The mill was erected in 1793 and in it Samuel Slater started the manufacture of cotton fabrics. No plans for cotton manufacturing machinery were allowed at the time to be sent out of England, but Slater carried the plans in his mind and when he arrived in Pawtucket was able to work out almost exactly the famous

Arkwright models. Some of the machinery which was made from his plans and used in the old mill is still in existence and will be exhibited in the museum.

The haircloth industry in America also had its beginning in the Slater Mill. In 1855 a number of Pawtucket men began the manufacture of haircloth in competition with European manufacturers. The latter, it is declared, resorted to desperate measures to prevent the new industry spreading to this country and the Pawtucket concern was hard pushed and facing failure when a Providence inventor, Isaac C. Lindsay, invented a self-feeding power loom which enabled them to compete successfully with European manufacturers.

The plans call for the restoration of the mill property to its original condition. The plant has not been used for some years and is much in need of repairs.

### What Is Speed of Jack Shaft?

Gentlemen:

I would like to ask through Southern Textile Bulletin some experienced carder the following questions: What is the correct speed for Jack shaft on slubbers intermediate and 7x3½-inch speeders? Also speed of front roller and spindles on No. 4 to No. 6 cotton on 60 hank slubber, 120 hank intermediate and 2 hank five frame roving?

Any information will be gladly appreciated by a young carder just starting out.



## "NATIONAL COLORS ARE NATIONAL ASSETS"

The line of dyes FULLY EQUAL IN QUALITY AND FASTNESS to corresponding pre-war types and now comprising NEARLY 300 INDIVIDUAL DYES made by the

## NATIONAL ANILINE & CHEMICAL COMPANY (INCORPORATED)

has indisputably established this company's pre-eminence as the LEADING MANUFACTURER of COAL-TAR DYES in America.

o o

Main Sales Office: 21 Burling Slip, New York

Southern Office and Warehouse

236 West First Street, Charlotte, N. C.

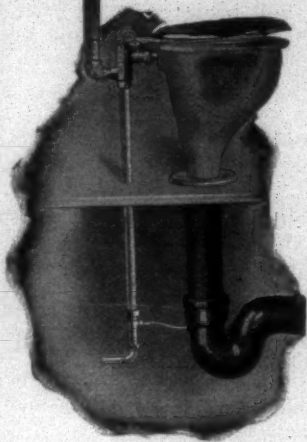
# VOGEL

PATENTED

## Frost Proof Closets

Over 300,000 giving satisfaction. Save Water; Require No Pit; Simple in the extreme. The most durable water closet made. In service winter and summer.

Enameled roll flushing rim bowls.



Heavy brass valves.

Strong hard wood seat.

Heavy riveted tank.

Malleable seat castings will not break.

Sold by Jobbers Everywhere.

**Joseph A. Vogel Co.**

WILMINGTON, DELAWARE

## While Your Mill is Making Substantial Profits

is the time to equip with loom harness whose service is measured from year to year instead of month to month.

"DUPLEX" Flat Steel Harness can show records of ten to fifteen years service at an average cost of only 10c to 12 1-2c per shade per year with high cloth production and low percentage of seconds.

Let us quote you.

### STEEL HEDDLE MANUFACTURING CO

GREENVILLE

PHILADELPHIA

PROVIDENCE

Southern Office

111 Washington St., Greenville, S. C.

Hampton Smith, Sou. Mgr.

N. B. We are the sole manufacturers of Nickel-Plated drop wires for every kind of loom.

### Georgia Cotton Manufacturers to Meet at Quebec.

Announcement has been made by the president of the Cotton Manufacturers' Association of Georgia that the twentieth annual meeting of that organization will be held at Quebec, Canada, June 29 and 30.

The meeting will be addressed by Sir Charles B. Gordon, president of the Dominion Textile Co., Ltd., Montreal.

Over 100 members of the association will make the trip, and in many cases will be accompanied by their wives. Following the meeting there will be an opportunity for the delegates to explore that section of the country and many touring parties are being planned for this purpose.

The arrangements for the trip to Quebec are being handled by E. G. Chesbrough, general agent of the Canadian-Pacific Railroad for the South Atlantic States. A specially equipped train will be furnished from Detroit to Quebec and a stop-over at Montreal is provided for. Hotel accommodations and convention quarters in Quebec will be furnished by that railroad at its Chateau Frontenac.

### Soviets Play Havoc with Cotton Mills.

London.—The demoralized condition of industry in general and of the textile industry in particular which obtains in Russia at the present is described in an interview accorded the Manchester "Guardian" by two prominent cotton mill managers for many years resident in Russia and just returned from there.

It was stated that in Russia, where industry is nationalized, "the whole of the textile industries are under the Central Textile Institute in Moscow, which sends material—when it has it—to the mills, and directs the distribution of the finished goods. This department is in turn under the Council of the People's Property. The management of the cotton mill at which one of our informants was manager and his colleague an assistant was transferred to a board of five members of the technical staff. A decree came that the men connected with the old capitalist ownership should be removed, and this meant the discharge of the manager and three others. Our informant was very sceptical of the efficiency of Soviet workshop discipline. The Soviet Government began by taking all administrative power out of the hands of the management, but had now found it was necessary to restore the power of dismissal.

"Up to recently that was only administered by the District Commissary. Then a change was made and the management were given the opportunity of stating a case for dismissal before the commissary, but in the man's presence and in such a way that the odium of dismissal was thrown upon the complainant. The decrease in production has been enormous.

"When the Soviet revolution took place the workers were told they had been oppressed by the capitalists and did not need to work so hard. They slackened off, and now the government was trying to get them back to the old habits of work.

Up to Christmas a standard wage was paid, although at actual piece rates the men would not earn half of it. Since then bonuses and other inducements to more production have been introduced. The food shortage in the towns is driving large numbers of industrial workers into the country villages, where supplies are more plentiful.

"No mill is working up to its full capacity. I doubt if there are more than a dozen cotton mills turning round at all. Not a third of our machinery was moving, and although three times as many workpeople were engaged, the production was only about a third of what it was before the war. I understood when I left that it was to close after Easter for lack of fuel, though probably also for lack of cotton. There is plenty of fuel if it could be got to the mill. The transport difficulty overshadows everything. Before the war 75 per cent of Russia's cotton supply came from Turkestan; now there are not railways, wagons or locomotives to keep up an efficient interchange of goods. Turkestan depends on Russia for corn and sugar.

"The breakdown of the transport left Turkestan starving, with the result that next year the cotton acreage was greatly decreased and its place taken by food crops. There are still, it is said, 5,000,000 poods of the old crops in Central Asia, but it cannot be brought into Russia. Recently the mills have been so short that the cotton mixture has been 75 per cent of waste to 25 per cent of cotton. The state of machinery in the mills is very bad, and repairs and replacements are urgently needed."

The personal treatment of these two Englishmen under Bolshevik rule has been a long story of petty persecution, searchings of clothes and houses, confiscation of furniture, of household linen and of money. Arrests on ridiculous charges, followed by release after a few weeks, were punctuated by Soviet orders to remove to smaller houses.

### Dates Fixed for 1921 World Cotton Meeting.

Manchester.—The Executive Committee of the World Cotton Conference, in consultation here with Rufus Wilson, secretary of the National Association of Cotton Manufacturers, United States, has fixed the dates for the 1921 conference, from June 13 to June 22.

The first three days will be devoted to meetings in Liverpool, and the remaining days in Manchester.

It has been decided to have 12 trade groups, splitting the spinners and manufacturers into separate divisions. There will be additional groups for research and statistics.

The meeting of the executive committee is reported to have been very enthusiastic, and the most successful results are expected.

### Fountain Mills.

Tarboro, N. C.

C. E. Hall.....Superintendent  
Joe Ellis.....Carder  
Jim Lewis.....Spinner  
A. T. Cross.....Winder Man  
R. M. Taylor.....Master Mechanic

# Our Merchant Marine and Its Possibilities

Address of Homer Ferguson

Mr. President and Gentlemen of the American Cotton Manufacturers' Association:

I did not make the jump from The Eagle's Nest to the coast as an entirely permanent jump, because, like all mountain men, we go back home again and we hope to be laid away in the mountains finally, and I have just come from a trip to the mountains where I spent a week or ten days catching mountain trout and playing golf on the splendid links up there at Asheville, and so the ships and merchant marine has been very much out of my mind and I am enabled to appreciate the point of view of the average American citizen who figures that it is not much of his business anyway and he is getting along pretty well as he is, so why bother about ships.

In fact, ship transportation is a near cousin to railroad transportation, and many of us felt for years, in spite of the predictions of the greatest railroad executives of the country that railroads needed to be kept up, that terminals needed to be built, that the property must be extended and equipment supplied—we really didn't believe it because when we got on the trains they ran as usual and we had the physical evidence that our transportation system was in fine condition, and today as a result of the policy of many years of limited income and of raising outgo, we find our country more seriously crippled than it has ever been in its whole history in regard to its transportation, and today we face a situation which is extraordinarily difficult to solve, and if it can be solved without national disaster we shall be very fortunate indeed. And so many people say, "We have the ships now, we have built them, we have spent three millions in building the ships; therefore we have a merchant marine; so why bother about it any more?"

I take it, gentlemen, that you are very much interested in taxes, in common with the rest of us, manufacturers particularly. It is a right sore point. During the war we spent as a result of 75 years of neglect of a prime national industry, very close to four billion dollars to obtain a marine which before the war could have been bought for less than a billion and a half, and today we are building ships at \$250 a ton that we used to be glad to get \$50 a ton for. Our expenditures do not stop there. As a result of our war policy, inaugurated early in the war, on creating a differential in favor of shipbuilding wages in order to build the ships—we had to have labor—and because of that the high costs the United States over has been raised more than from any other single

cause, and today the railroad situation is more complicated by it than by any other cause. A first-class mechanic in a railroad shop today gets 72 cents an hour. The same mechanic with the same training in a shipyard gets 80 cents an hour. We created a differential in favor of shipbuilding, but unfortunately at that time it was not seen that the entire industrial and economic resources of the country would be required to win the war. And we have not gotten over the upset yet.

Now the merchant marine of Great Britain, the greatest in the world, at the beginning of the war, cost them for all the ships then in commission about one billion dollars. So gentlemen who say we will have a marine but we will not pay for it cannot neglect the lesson of the war where we didn't have a marine and we paid for it three or four times; and as a matter of fact we haven't got a well balanced one yet. You and I read in the papers how we would build ships by the mile and by the yard and everything else. We would standardize them so that everybody could build a ship and everybody could own one. Well, the theory was very nice. But when you get so you can build a ship of a certain type, a standardized type, lo and behold you have more of that kind than you want. Of course you can learn to build a 5,000-ton freight ship or a 10,000-ton ship according to a pattern. But that is not shipbuilding. That is one part of it. That is something like cotton manufacturing where you turn out one kind of goods and specialize on that in order to secure quantity production. But that is not cotton manufacturing. Shipbuilding is a ramified industry and it takes a whole lot of people to do it right.

Of course we have the ships now and the government is being pressed to dispose of them to private owners. I take it that like all good business men in the United States you gentlemen do not believe in government ownership of anything which may be owned and operated by private initiative. (Applause). Business men in every business organization in this country have gone on record on that point. The government has this 10,000,000 tons of ships. What should it do with them? How should they be operated? We are all in favor of the government disposing of these ships, but as good taxpayers and good citizens interested in the ships we do not want them to give them away. We do not want them sold for less than they are worth or for more than they are worth. What is the basis of value of this fleet? If any of you gentle-

men invested in ships, you would invest on the basis of your principal being secure and that a fair return on your money was a reasonably assured thing. When you buy them now, or a dozen of them now, it is like buying a pig in a poke. There are only two classes to buy them: Either a man who has the shipping business so secure that he feels that he can keep on operating them regardless of conditions, or the other who will buy them as a gamble, who will operate them if he can, and if he cannot, turn them back to the government. But one of the prime factors in the values of these ships is the conditions under which they will be operated. Is the government going to give to those vessels any preferential treatment? Is it not my purpose to discuss the question of differential duties or preferential treatment except to say that for over a hundred years we did not undertake to build and operate ships except in our coastwise trade. One hundred and fifteen years ago we carried 92 per cent of our products in our own vessels. We did it by the very simple expedient of saying that in the carrying of our own goods to our own customers and in bringing back their goods to us in return we would give our own vessels preferential treatment in that trade as compared with the vessels of the other party who had no primary interest in the business. As a result of the War of 1812, which we won on paper and which we lost in the treaty, we gave up that right. It prevented us from granting to our own vessels any advantage. And from 1828, when we gave up the last shred of preferential treatment of our own vessels, our merchant marine has gone down and down until in 1920 we carry less than 20 per cent, and that 20 per cent is largely controlled by railroads or by interests which were so firmly entrenched that they did not require preferential treatment in order to retain that small percentage of our shipping.

Before the war the wheat men of the north and the cotton men of the south said, "We do not care whose ships carry our goods so they are carried by the ships granting the cheapest rates." We had kept the coastwise ships for our own trade, or we would not have had any ships at all. When it came to sending our soldiers to France we did not have the ships to carry them. One million were sent under foreign flags; one-half million in captured German ships which they were kind enough to leave in our harbors when they entered the war. And we would not have got into the war at all had we had to depend upon our

own shipping. When the President went abroad to settle the affairs of the world as best he could, did we have a ship to carry him? He travelled in a ship of German make. Even the German names are still on the doors of that ship, I am told. The only thing American about that ship was its name—the George Washington. That ship is German from keel to truck. I understand the German signs are still on the staterooms. Why did he go abroad in the George Washington? We didn't have a suitable ship for his use. Why, gentlemen, did we not have a suitable ship? When the Panama Canal act was passed, and after we had spent \$400,000,000 on the Panama canal, it was provided that no ship might pass through the canal any share of which was controlled by a transcontinental railroad. The Southern Pacific company wished to build two George Washingtons. They asked no aid of any kind, but they wanted to build and operate these ships through the canal to San Francisco and on out to the Orient. But they were not allowed to build these ships. We were afraid the railroads would dominate the canal. We were not afraid of the Canadian Pacific. They can run their ships through the canal now. We are very fond in this country of getting after our own "Big Business," but we don't pay very much attention to anybody's else "Big Business." It seems the penalty of success is to incur the political displeasure of a good many gentlemen who express their displeasure at the cotton manufacturers and other manufacturers.

Everybody in the business knows that before the war the shipping of the world was controlled from London and Berlin, and a few gentlemen in those centers ran the shipping of the world and fixed the rates. We did not mind that.

Anyway, the President went to France and back again a couple of times in the George Washington, and it does look to me like in trying to settle the affairs of the world and in sending our chief executive to settle them, that it would comport with our dignity to send him in a vehicle of our own making. We think so little of these things that most Americans going to New York and seeing a ship in the New York harbor think it is an American ship. We think so little about it that even in the printing of our money we put on the back of some of our bills a four-funnel German ship; there has never been an American ship built like it in the world.

What is the matter with the shipbuilders? We build ships for people to make money with. We build

## DOBBINS SOAP MFG. CO.

PHILADELPHIA

For Over Half a Century Makers of High Grade Soaps and Scouring Materials for Textile Manufactures. Dobbin's Cotton Softener a Specialty

warships too, and in this country we build and design and complete as good and better warships than any country in the world. We do not think of going abroad to build them, and furthermore it costs but little more to build them here. But, gentlemen, it requires some practice to build ships. It requires a start to build ships. And we cannot build ships unless men think they can operate them successfully. So with this immense fleet we have and its disposition to private owners the government has within itself the power to fix the policy under which they shall be operated. If the conditions are going to be such that a purchaser may feel that he can gamble on the operation of his ships, then they should frankly so state it. It should in decency settle upon its policy before it sells its ships. Otherwise, it may sell its ships at a loss to itself, or it may sell them to a customer who has to gamble on the chance to operate them successfully. Therefore, with three billion dollars of ships to sell, it would seem to be the part of good government, of good sense, to say, "These are the terms under which you can operate, and we will sell you the ships."

That is only one factor. The skilled men to operate the ships are very important. We are somewhat short in them now. We are building them up. The agencies abroad to handle the ships at the other end, to look after the return cargoes; we have practically none of them. They are an absolute essential. The insurance of the vessel and the cargo is one of the prime factors; involves probably more money than any other outlay on account of shipping. Your insurance now is practically all carried abroad. Marine insurance in this country was so scarce before the war that when you built a battleship for your Uncle Sam, you insured it in London and Berlin, you could not insure in the United States. And actually at our place we have a ship damaged by fire in course of construction and a very excellent friend of mine, an Englishman, had to get permission from the navy department to go abroad and inspect it and tell us when we had repaired it and whether we could insure it. Lloyds is a very fine organization, a classification society on which insurance is based, represented throughout the world by citizens of Great Britain, and you build your ship to suit them. Now, perhaps, someone thinks he can operate a business in the United States to suit the nationals of another country. But the United States has generally got along because it has discarded most of the rules in engineering and other lines as practiced abroad, and it has built its railroads and its cotton mills in its own way. Why don't we do something of our own? We are engaged in doing it, but it is a long haul. We have gotten up a classification society to class our ships as built, but it will not be done this year, or next year, and it will not be finished in ten years. It requires time.

The control of the sea, the control of the channels of commerce, is just as important to a man ship-

ping his goods out of Norfolk or New York, out of Australia or China or South Africa or Europe, as the control of the rails over which it runs. When you get into ocean transportation, they say the ocean is free, anyone free to engage in it. It is not so free that you can particularly notice it. Not if the other men have the terminals, the coaling stations, the agencies, the return cargoes already secured, all the paraphernalia of transportation.

We might get along without a marine of our own. We have for years and years. But we have discovered during this war that any country to be a free and independent country able to exercise its own judgment and do its own job in peace and war must have this vital thing or else it must stay at home. We have heard much about the peace of the world lately, and the League of Nations; and after all, what does it simmer down to? Great Britain and the United States stand as the two great steadfast factors in the world that will save the world if it is to be saved. Two partners, if you please, working together along the same lines and with the same ideas. But if we are to remain partners, it is necessary that that partnership be based on something fundamentally sound, and that is that each of the partners shall have the things that belong to them in order to retain their independence as far as possible. You and I cannot be partners in any business if I must ride to the office and back in your automobile, must be dependent upon you for getting my bread. It cannot be. And the wisest and best Englishmen know that it cannot be; know that the United States must have the things that necessarily and fundamentally belong to a country determined to live its own life in its own way.

It is a long cry from this to the manufacturing of cotton goods, you say? How long? The United States at this time, or as soon as it gets to work again, will have after the replacement of our own depleted markets a surplus of manufacturing capacity estimated at from 25 to 35 per cent. That surplus must be disposed of abroad. A good deal of our goods are going abroad now. That will continue. It is a necessity to us. In years gone by men came to us with their ships for their raw materials which they had to have. No difficulty about a man coming for cotton or copper or things he has to manufacture. But when you are disposing of manufactured goods, it is a vastly different proposition. These goods out in competition with manufactures in the world. You say, Why should not we send them in a Norwegian ship or a British ship or a French ship? Do you think anyone else is going to market your goods in the same way you would market them? Do you think the nationals of any other country would take your products into Europe or South America and market them through their agents, their merchants, their banking connections, in the same way that they would market their own? The goods we have mostly sold abroad have been the things where we were not in very keen competition with the

foreign manufacturers.

Men say that England has never favored her marine much. Their memories are short. They started out in 1660 under Oliver Cromwell with a proclamation that all goods leaving England would be carried in British ships. There was quite a howl raised at the time. She has paid some subsidies. She has paid whatever was necessary to be paid. She has had a tremendous advantage over us; in fact, two or three; but prime and principally is that Great Britain lives by virtue of its sea commerce. That is her life. Without it she is gone. So there is the spur of necessity. Another advantage is that her people have kept to the sea while ours have developed the country. Another advantage is that London is the financial center of the world. We all read during the war that it had moved over to New York. A good many of us have noticed that it has moved back again. We may have the money but London has the advantage in a great many ways. Among others, its geographical position is such that in all probability London will be the financial center of the world for many years to come. Not that we want to go into competition with them to absorb their trade; but if we have a trade of our own, with our own customer, it does seem to me but the part of wisdom and good sense that we should say in regard to that trade that This is ours, and not hand it over to the common carrier of the seas.

The economic factor is a big one. The political factor is a much greater one. We had an experience in this country many years ago with our railroads. We found out that the railroads of the country and developed a political strength that was considered a menace in many states. Hence there followed the formation of the Interstate Commerce Commission, which has wrought a great deal of good and a good deal of destruction, too, I presume; but anyway we know that whoever controlled transportation came pretty close to controlling a good many other things. And whoever controls the transportation of the world controls everything else.

We have heard a good deal of peace lately, the peace of the world. There is not going to be any lasting peace until we control the transportation necessary to our own commerce, until the right of any nation to control the transportation necessary to its own commerce, with its own customers, is recognized, because thereby we do away with a good deal of political control. The idea of our doing business with any country on terms not agreeable to us seems to me to be absurd.

You all know the value of salesmen in your business. Is there any salesman in a foreign market that will compare with an American ship, flying the American flag, officered and manned by Americans, operating through American agencies, and showing the merchants of those countries and the people of those countries that the Americans are there to do business in a truly American way? Not dependent upon other people for their transportation; not dependent upon other

people for their insurance; not dependent upon the merchants of other nationalities to sell their goods? You might as well have a department store and turn over the delivery to your competitor.

Now how might that condition be changed? The history of our legislation up to the beginning of the war was, so far as my experience goes, covering some 20 years, that not a line or a comma or a word was written into the national statutes that any shipbuilder or owner or operator wanted. It was invariably not done. We were called a monopoly by as high an authority as the President of the United States. I saw the other day in the New York World an article containing the statement that the coastwise shipping of the United States was a monopoly that the lawyers of Richmond have on the legal business of their community. Very much the same kind of monopoly as the citizens of the United States have on the office of President; you must be born in this country in order to ever become its President, and some hundred million of us have a monopoly on that job. It is no such thing. Unless our coastwise trade had been held for our own people we would have had no vessels at all to go into this war.

Then you gentlemen say why don't you manufacture ships the same way we manufacture cotton goods, we make them as cheap as they do in Lancashire. Shipbuilding is not manufacturing, gentlemen. The process of manufacturing, of duplicated work, in the shipyard will not comprehend 5 per cent of the labor. It is building, gentlemen. It is vastly different from machine manufacturing as we understand it. Yet when the war came on our costs were about the same as the British costs. Now they have shut up a great deal more. Even if our costs of building and operating were the same, the man that goes into the ship carrying business had better look out, because he will need some assistance from somebody to get established in the business which is already operated by someone else. And unless the Government of the United States settles on a policy which will give to the citizens of this country a preferential treatment of some kind, it will not have a marine and this fleet which it has built will eventually pass under a foreign flag. I am willing to stake my reputation on that, and so is every other man who is experienced in the business. On the other hand, if they will grant that preferential treatment in the beginning, after they get established it is quite possible that they will be able to run without being helped at all. How did Germany build up its fleet? By giving their own ships the preference which we all know about so that the ships of other nations could not profitably enter Hamburg and Bremen or other German ports in competition with the German fleet. How did England build up its fleet? I have seen an Englishman stay in New York six weeks to catch an English vessel back to Europe. They give a preferential treatment, while not on the statute books, is the most powerful kind of preferential.

(Continued on Page 32.)

**Confident United States Is Panic-Proof.**

Confidence that the currency and banking system of the United States has made the country "panic-proof" under wise financial leadership, is expressed by the National Bank of Commerce in New York, in an article bearing the title, "The Normal Business Cycle," in the June number of its magazine, *Commerce Monthly*. The Federal reserve system, the bank says, has been devised to make panics impossible in the future, and there is abundant reason to expect that we shall not see again in this country such demoralization and chaos in the money market as the years 1893 and 1907 witnessed.

No currency and banking system can avoid the recurrence of crises in the sense of liquidation periods, or periods of readjustment, and such periods, unless too violent and prolonged, are wholesome rather than harmful, the bank says. It explains that such crises are merely phases of the general rhythmic movement in business. It differentiates, however, between crisis as "an affair of industry generally," and a panic as "an affair of the money market." It declares that sound bank policy can and does prevent crises from degenerating into panics.

"As our understanding of crises has increased," the bank states, "we have come to substitute for the notion of crisis the notion of 'business cycle' and to recognize that the crisis is merely a phase of the general rhythmic movement in business—crisis followed by depression, depression by prosperity, prosperity by crisis again, and so on. There is good reason for believing, too, that with better understanding of the business cycle we are gaining better control of it, that the period of prosperity can be lengthened, that the crisis can be made less severe and that the period of depression can be shortened. If we can minimize the extravagance and mistakes of the prosperity period we can make the reaction from it less severe. This relates to the normal crisis.

"Periods of reaction and liquidation," according to *Commerce Monthly*, "relieve maladjustment and strain. They prevent unsound policies from being carried too far. They give time for the maturing of new plans and for the careful introduction of new processes. They check wastes and restore efficiency. They allay financial fevers. They need mitigation and control—but progressively we are learning to mitigate and to control them."

"The most important proposal that has yet been made for the mitigation of the extremes of the business cycle," the bank says, "is that the various grades of government, federal, state and municipal, together with large corporations like the railroads, should adopt a buying policy designed to throw as many of their purchases as possible into the period of depression and to withdraw from the market in considerable measure at the height of the period of prosperity."

**The Necessity of Better Baling.**

(By R. A. S. Reoch, Print Works Dept., Pacific Mills, Lawrence, in "Builders".)

The usual method pursued in baling grey piece goods, is to cover the compressed bale with burlap, and protect the top and bottom with paper, which extends part way from either end, but rarely covers the middle portion of the bale. The result is that during transportation to the finishing works, dirt sifts in and soils the laps of the cloth. It is even quite common to find the selvages or folds stained with oil, absorbed from the floor of a dirty freight car. When the goods are intended for bleaching, the dirt and oil can usually be removed during the bleaching process, but if, on the other hand, it is the intention to finish the pieces in the grey state, as for instance "Starch-Back" for shoe linings, stains of this character can not be eradicated. Shoe-shops are becoming more and more critical, and calmly reject pieces because of imperfections such as those referred to, even cut marks being criticized.

The cotton mills can help matters greatly, if more care is displayed in the baling process. Heavy Kraft paper should be used inside the burlap, and the sides of the bale covered as well as the ends. Many mills use paper for this purpose that is of such poor quality that it breaks up and defeats the purpose intended. As an additional precaution it might be well to drop the last fold of each piece, and bring it around the laps in such a manner that the back-side of the piece would completely cover the folds and thus prevent soiling of the edges. Any dirt that reached the cloth would thus be deposited on the back of the piece, and would affect only a limited area.

These suggestions are offered as possible helps towards overcoming a condition that is a constant source of loss and annoyance to the finishing mill. It isn't fair that loss of yardage and the making of short pieces and remnants that ensues when such blemishes are cut out should be saddled upon the innocent finisher. A campaign of education in the baling departments of such mills as turn out shoe cloths or other goods finished in the grey state seems to be the only solution of this vexing problem.

**Consolidated Textile Corporation.  
Ossipee and Hopedale Division.****Elon College, N. C.**

John L. Robinson...Superintendent  
John H. Coleman.....Carder  
Geo. W. Tickle.....Spinner  
Luther Isley.....Slasher  
W. B. Morgan.....Weaver  
N. M. Lee...Napper and Cloth Room  
B. M. Bennett.....Dyer  
P. M. Geringer.....Master Mechanic  
C. N. Somers.....Shipping Clerk

**Toxaway Mills.****Anderson, S. C.**

Jesse T. Crawford.....Supt.  
J. P. Pulliam.....Carder  
F. E. Young.....Spinner  
J. Westmorland.....Weaver  
W. F. Pickens.....Cloth Room  
S. M. Heggood.....Master Mechanic

# Receptacles



## That Serve You Best

Diamond Fibre Receptacles are an efficient and economical transportation system. They are made of Diamond Fibre, which is tough as horn and almost as hard as iron, yet lighter than aluminum. This material does not dent, crack, break, or splinter. A superior material and superior construction provide an unusual combination of great strength and durability with light weight and convenience.

Your product is protected when handled in these receptacles, because the interior construction is smooth and flawless. For example, Diamond Fibre Seamless Roving Cans are in great demand by mills because there is not a seam or projection to catch a particle of the contents. Furthermore, the close texture and glossy surface of the fibre Receptacles preserve their fine appearance under the hardest usage because the color is in-built and the surface does not chip, nick, or wear off.

There is a Diamond Fibre Receptacle for every mill need. Our roving cans, mill boxes, and baskets, doffing cars, gill cans, trucks, barrels, etc., are leaders in their respective fields. Standard sizes and designs, or made to any specifications. Write us your requirements and let us co-operate.

We maintain an office in Greenville, S. C., to serve the Southern mills.

*Send For Special Catalogue.*

**Diamond State Fibre Company**

DEPARTMENT S-T

**Bridgeport, Pa. (near Philadelphia)**

In Canada, Diamond State Fibre Co. of Canada, Ltd., Toronto

# Humidity in General

(From May Issue of "The Fog Horn"  
Published by Parks-Cramer  
Company, Fitchburg, Mass.)

There seems to be some confusion of the term relative humidity as distinguished from absolute humidity.

Absolute humidity is the actual amount of aqueous vapor in a cubic foot of air, usually expressed in grains.

Relative humidity is the percentage of vapor in a cubic foot of air at a given temperature, as compared with the greatest amount of vapor that can be contained in the same cubic foot of air at the same temperature without precipitation.

In other words, relative humidity is the degree of saturation.

For instance, air at 60 degrees F. can absorb nearly six grains of aqueous vapor per cubic foot. At 86 degrees F. it can absorb about thirteen grains. In each case, air with these respective amounts would have a relative humidity of 100 per cent. At 50 per cent relative humidity, the air would contain half these respective amounts.

While air always contains a certain amount of moisture, this amount is extremely variable. The absorbent capacity of the air for this moisture varies directly with the temperature. In fact, temperature and humidity are interdependent the one upon the other.

Since mills are not run as laboratories, and since laboratory condi-

tions are not generally possible in manufacturing plants, the simpler the device, including humidifiers, the better are the results to be expected, all other things being equal.

To the far-seeing manufacturer, the question resolves itself not only into one of more and better production because of humidification, but better conditions for his operatives. A good place to work begets good operatives, more and better work. The question then is not altogether one of dollars and cents, but of dollars and sense.

It is apparent that if the atmosphere is over-saturated, it is harmful to health; but properly humidified air acts in a manner quite the opposite. Proper humidification should introduce fresh, pure water. This diminishes the dust and lint in textile plants, and tends also to neutralize the carbonic-acid gas given off in the breath of the occupants, by freshening and revivifying the atmosphere.

While no claim is made for the Turbo system as a ventilating apparatus, the water and air that are introduced are fresh and pure. Neither of them is second hand.

A properly humidified air will always be more healthful than a hot, dry atmosphere, and decidedly more so than one containing dust and lint.

It is generally necessary to maintain the humidity conditions inside

the mill irrespective of the atmospheric conditions outside. To do this, the atmospheric pressure should be a little greater inside the mill than the prevailing barometric pressure outside.

At night, when the outside temperature decreases perceptibly, the percentage of moisture, the relative humidity, increases proportionately as the temperature drops. This is the cause of dew.

The most desirable system of artificial humidification, then, is one that can be started before the mill starts. This brings about the proper conditions of humidity by the time the operatives arrive. A system that depends on mill power will cause the humidity to lag until the proper conditions are brought about. This means loss of production and deterioration of product and is especially marked on the morning after a holiday, or on cold, dry mornings in winter.

Ventilation of itself will not prove efficacious, for oftentimes the outside air is warmer than that inside the mill. Drawing in outside air under these conditions will reduce the relative humidity. This explains why the most effective systems must be arranged to work directly on the air in the room rather than by blowing in outside air.

A proper and efficient humidifying apparatus should be a flexible one; one in which it is always possible

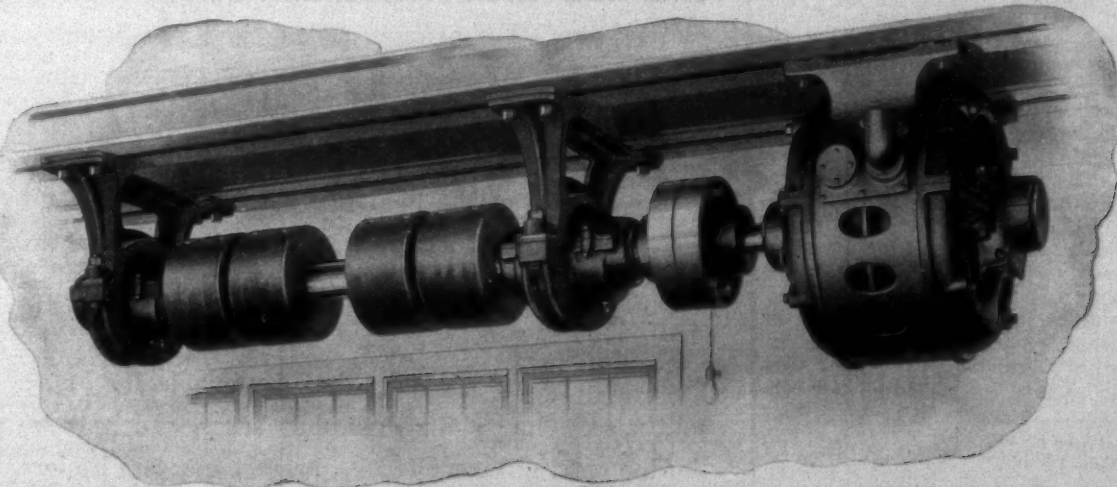
to regulate the degree of humidity needed in each separate department. It should be variable at will, with no great amount of manipulation.

Live steam introduced into the mill is always under control; but since it increases the temperature it defeats its own object. The increased temperature continually calls for larger amounts of moisture to maintain the desired relative humidity. Moreover, it has been found detrimental to health; a source of discomfort; inordinately expensive, and in England, is regulated by law.

A proper system of humidification has proven that it is possible to adopt lower standards of temperature and, contrary to general impression, to produce, with much more comfort to all concerned, better manufactured results.

The manufacturer of today is infinitely better off than his predecessors. In the matter of humidity, suitable climatic conditions were recognized as necessary by the early manufacturers. The mill site was selected accordingly, especially in England. A more effective humidifying apparatus seems to be required in North America than in some more favored places, and the necessity for more favorable atmospheric conditions has been the cause of much investigation of the subject. It is said that the natural atmospheric conditions of England had

(Continued on Page 29.)



## "Four Frame Drive"

Universal Motor Drive For Spinning Frames  
For The Electrification of Old Mills

# ALLIS-CHALMERS

MILWAUKEE, WIS. U. S. A.

With this new drive all pulleys are on one end and can be located to suit any spacing between frames. This makes it unnecessary to move the frames in the electrification of old mills.

The equipment consists of a special spinning frame motor for ceiling suspension equipped with conduit terminal box; bushing type flexible coupling; adjustable hangers; shaft with paper pulleys for driving four spinning frames.

Send for new textile bulletin No. 136 A.

**Spartanburg Rotarians Visit Pacolet Mills.**

The members of the Rotary Club, of Spartanburg, were taken last Wednesday on a visit to the Pacolet Mills, by Victor Montgomery, president of the mill company. Mr. Montgomery, who is one of the best known and most successful mill men in the South, entertained most enjoyably for his guests who were unanimous in their enthusiasm over the conditions existing at the mills.

The party made the trip from Spartanburg to Pacolet by automobiles, being received there by Mr. Montgomery, Superintendent Lancaster and others. One of the first places visited was the nursery where the babies are cared for while their mothers work in the mills. Every precaution is taken to keep the babies happy and contented, and the nursery is splendidly equipped. It is in charge of Miss Katherine Dozier.

The Girls' Club building is fitted up very much as an up-to-date Y. W. C. A. From kitchen to parlor, cleanliness and beauty vie with each other in making this place ideal. The shower baths, the club rooms, the reading rooms—all are arranged with a view to the comfort and pleasure of the young women.

One would have to search far to find a Y. M. C. A. better equipped than the "Y" of Pacolet Mill village. The visitors were shown the big hall with a seating capacity of 1,200, where "movies" are shown. The people of the village are charged a small admission fee, not because it is necessary especially, but because it was discovered some time ago that people will attend picture shows better when they pay to see them.

The Rotarians became boys again when turned loose in the physical culture hall of the "Y." They began jumping horses, pulling up on the bars, "skinning the cat" and doing many of the stunts they used to pull off in the days "When we were young, Maggie." They tossed the basket balls and the footballs, and several other kinds of balls around in a most reckless manner, ever and anon "accidentally" hitting some older member who invariably got in range of the barrage.

The visit of the Rotarians to Pacolet was on the eve of the anniversary of the great flood of June 3rd, 1903. Taking a number of his guests to a window of the athletic hall of the "Y," Mr. Montgomery pointed out where the flood did the greatest damage. For a few minutes he grew reminiscent. He told of the washing away of one of the Pacolet Mills and pointed with pride to the new structure that has arisen in its place. He directed attention to one or two of the old houses by way of comparison with the model cottages that now adorn the village. The old mill washed away had 17,000 spindles. The one that has arisen in its stead has 35,000. It was built in 1906 and has twice the capacity of the mill that stood before the flood.

At about 3 o'clock Mr. Montgomery invited his guests to the dining hall of the "Y." There tables were spread in elegant style and the room artistically decorated. A bevy of pretty girls, young ladies who are

employed in the mills, were in waiting to serve the visitors. They were under the able direction of Miss Belle Fuller.

The guests at this luncheon each received a valuable souvenir from Mr. Montgomery in the shape of a necktie. There were also distributed souvenir pictures showing the type of beautiful cottages that make Pacolet one of the prettiest mill villages in the country.

Mr. Montgomery was presented with the Rotary shield as a sign of appreciation by his guests. In thanking his fellow Rotarians for their gift, Mr. Montgomery said the object of the visit was to get better acquainted with a man and see what he is endeavoring to do. He explained that what Rotarians had seen and would see after luncheon represented no mercenary spirit. It was all done for the betterment of working people, and to make them contented and happy. With this purpose in view, it was declared there was no probability of bolshevism entering Pacolet Mill village. As an example of the thrift encouraged by such work, Mr. Montgomery called attention to the saving habit of the employees and distributed a statement of the "Employee Savings Bank," which follows:

**Statement.**

As of May 31st, 1920.

**Resources.**

Loans and investments...\$180,178.90  
Cash and due from banks 88,783.99

Total .....\$268,962.80

**Liabilities.**

Capital stock ..... 5,000.00  
Surplus and profits .... 11,698.86  
Deposits ..... 252,264.03

Total .....\$268,962.80

Bank organized March 15th, 1917. On date of organization employees had on deposit with the Pacolet Manufacturing Company, \$27,225.22, representing 200 depositors. Accounts averaged \$136.13.

On this day the bank has 1,028 accounts, averaging \$245.39. We have 359 families in the village, a population of 1,974, 2.9 depositors per family of \$702.68. More than every other village of \$702.68. More than every other (1.9) man, woman and child in the village has an account with the bank.

The first place visited after luncheon was the laundry of the mill village. It is a far call from John Chinaman to the modern laundry, but the Pacolet Mill Laundry is so far ahead of the average laundry of today comparisons would be out of place. This laundry does washing for 237 families, for the average of \$1.20 per week per family. The plant is not run for the purpose of making money. It just about pays the operating expenses. Ten people are employed in this plant.

The meat market of Pacolet Mills is in charge of W. O. and J. F. Horn. Here is a market without an offensive odor. In fact, it is a positive delight to walk into this place. The refrigerating plant in the market is a model. The Rotarians went in the refrigerating department and viewed the sides and quarters of beef on hooks. It was like a trip to the North Pole.

(Continued on Page 28.)

**When In Need Of**

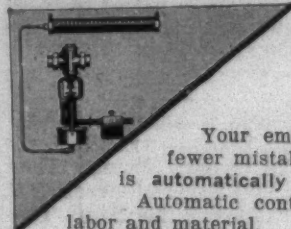
Case Lining, Baling Paper, Cone Wrapping,  
Twine, and Toilet Paper

Write us for prices

**ATLANTA PAPER COMPANY**

ATLANTA, GA.

B. C. GLOVER, Salesman for North Carolina.  
CHARLOTTE, N. C.



Save Coal  
Save Labor, Save Material  
with

**Powers Heat Regulation**

Your employees, in office or shop, work better, with fewer mistakes and accidents when the room temperature is automatically kept right.

Automatic control in processes involving heat saves labor and material.

Controlling heat at the point of use saves coal and labor, besides improving output in quality and quantity.

Ask us to prove it to you at our risk.

**The Powers Regulator Co.**

Specialists in Automatic Heat Control

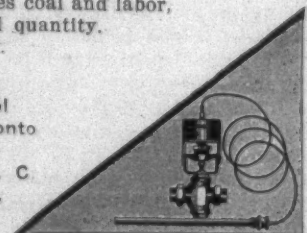
New York Chicago Boston Toronto

Southern Representatives:

"ASKUS" Ira L. Griffin, Greenville, S. C.

Guy L. Morrison, Charlotte, N. C.

(1211)

**254 Link-Belt Silent Chain Drives**

Operating Spinning Frames, Pacolet Mfg. Co., New Holland, Ga



NOTE the good general appearance of the room—no long, flapping, dangerous belts. The result is 98.2% guaranteed efficiency in the transmission of power to each spinning frame. Link-Belt Casings make for safety and continuous lubrication.

Let one of our experienced textile power transmission specialists explain the effectiveness of transmitting power thru Link-Belt Silent Chain Drives. Send for our New Book 425.

**LINK-BELT COMPANY**PHILADELPHIA  
CHARLOTTECHICAGO  
J. S. COTHMANINDIANAPOLIS  
COM'L BANK BLDG.

**LINK-BELT**  
**SILENT CHAIN DRIVES**

**Woodside Opens "Wildwood Park."**

Greenville, S. C.—Announcement is made by John T. Woodside, president of the Woodside Cotton Mills, that approximately one thousand acres of mountain land has been thrown open to the employees of the Woodside Cotton Mills Company, with plants at Greenville, Simpsonville and Fountain Inn for their use as a summer camp.

This properly is located on the Greenville-Asheville highway and is known as the old Wilson place. It embraces some of the most picturesque scenery to be found on this highway. The lower line begins near the store of Mr. Ballenger and the upper line is within a few feet of the old water mill near the peak which can be seen from the roadway. Signs have been placed on both lines and also on the rocks near the road.

This is known as the new road and it was necessary to blast huge boulders from the roadway. It is on the top of these that the pavilion will be placed. The lumber has been bought and carpenters will be on the site this week for erecting this building and repairing several houses which are already on the property.

This pavilion will be easily seen from the roadway several miles down the mountain and commands a beautiful view of the valley below. It is the plan to have a large lake in this valley but that work will not be begun just yet.

There are many interesting places in the park and signs are being pre-

pared to guide the hiker to these places. There are several caves which will be the delight of the Boy Scout explorers, and a troop of scouts will go on a camp this week and will go over the place to locate places of interest. There are beautiful mountain streams and good fishing. There are bright, limpid springs here and there for picnic crowds and altogether it is an ideal spot for a summer camp.

The Hendersonville-Greenville bus line passes through the property and this with the number of cars owned by the employees will afford ample means for conveying outing parties to the spot. Those living at Simpsonville and Fountain Inn can easily make the trip in two and a half hours.

**Texas Textile Association Meets.**

Brenham, Tex.—The South Texas Cotton Mills, through Manager Thos. A. Adams, and Superintendent C. S. Tatum entertained the Texas Textile Association in its regular meeting in Brenham last week. A number of local citizens, who were interested in the cotton mill met with the association, and assisted in the entertainment. The Textile Association delegates were conveyed to the beautiful grounds of the Brenham Gun and Rod Club, where an excellent barbecue was prepared for their dinner. Among those who assisted Manager Adams in the entertainment at the Gun and Rod Club grounds were Hon. D. C. Giddings, T. A. Low, Henry Muller, Dr. J. J. Marek and W. H. Zschappell. The barbecue provided was of the very

finest, prepared over the pits at the grounds by experts, and served with a splendid sauce.

The Texas Textile Association was represented at the meeting in Brenham by about thirty members, who came from the various mills of the State and from A. & M. College textile engineering department. At the grounds where they were entertained the business session was held. The principal discussion was of the labor situation which confronts the cotton mills of the State.

During the day the delegates to the convention visited the Brenham Cotton Mill and after that visit they were warm in their praise of the splendid condition of the mill. Many of them remembered the mill a number of years ago when it did not have such a good reputation in Texas cotton mill circles, and they said that they were agreeably surprised to find it in such fine running order, and the entire business so capably managed.

All the visitors to Brenham expressed themselves as well pleased with their visit here, and that they were ready to attend the next convention which is held in Brenham.

The officers of the coming year are as follows: J. W. Cagel, of Denison, president, and C. S. Tatum of Brenham secretary-treasurer. The next meeting will be in Hillsboro, Texas, this fall.

**Stability for 1921 Seen by Knit Goods Jobbers.**

Chicago, Stability and progress in the knit goods industry

can be expected for 1921, if the yarn spinners and knit goods manufacturers can offer a definite assurance to the jobbers, and the jobbers can sell merchandise to the retail trade with the same assurance that there will be no excessive profit in any of the steps from yarn to retailer. This was the sentiment expressed by 60 underwear, hosiery and knit goods buyers, members of the Jobbers' Association of Knit Goods Buyers, an auxiliary of the National Wholesale Dry Goods Association, attending a special meeting at the Hotel La Salle here yesterday, called to discuss the present situation and prospects and the merchandising policies for 1921.

Buyers pointed out that the confidence of the retailer will be firmly established only when he feels convinced that goods are priced by the yarn spinner, manufacturer and jobber on a basis of actual cost, and asserted that the wholesalers stand ready to co-operate to the utmost in keeping prices down to the lowest consistent levels. They declared will enter the market feeling that there is no false foundation to the prices quoted for next season.

Ernest C. Hall, of Clawson, Wilson & Co., Buffalo, president of the association, was chairman of the meeting, which occupied both morning and afternoon sessions.

The price situation in hosiery and underwear was discussed, information being presented to the effect that yarn and labor costs were operating to make reductions in wholesalers' costs extremely difficult. It was pointed out that, with yarn at

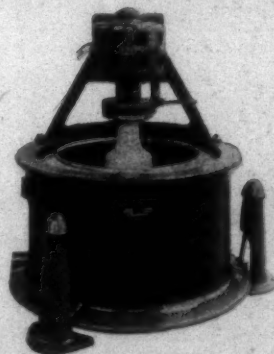
# HYDRO EXTRACTORS

## GILLESPIE MOTOR CO.

Manufacturers of

### Hercules Hydro Extractors

Patents Pending

Type B Motor Driven  
Self Balancing**SIZES**

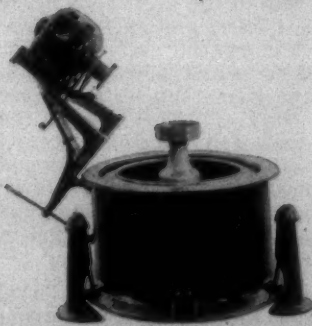
30, 36, 42, 48, 54, 60"

Southern Representative  
**E. S. PLAYER**  
GREENVILLE, S. C.

ANNOUNCE, that in order to provide increased manufacturing facilities, that these extractors will be hereafter manufactured and supplied to the trade by their associated company, the

### EAST JERSEY PIPE CO.

Main office  
**PATERSON, N. J.**

Only Hercules Extractors  
have Motors Mounted on  
Tilting Bracket to Facilitate  
Removing Basket and  
Bearings.

Direct Motor  
OR  
Belt Drive

Eastern Representative  
**F. A. Tolhurst**  
612 CHESTNUT STREET  
PHILADELPHIA, PA.

**EAST JERSEY PIPE CO. SUCCESSORS TO GILLESPIE MOTOR CO.**  
PATERSON N. J.

almost six times its pre-war price, with labor at 2 1-2 times its pre-war cost and with the automobile industry taking a heavy tonnage of cotton yarn for cord tires, it was a serious problem to get raw material and labor costs down so as to permit of lower prices. Merchandise for the balance of 1920 is now in the distributors' hands and is owned by retailers and wholesalers on a basis lower than today's mill prices. Mill opening prices for 1920 merchandise were based on yarn which has almost doubled in price since the placing of that business. In view of the raw cotton and yarn situation it appeared to be beyond the range of possibility that the present mill prices can be as low. In fact, increased prices in yarn and labor will largely control in 1921 prices."

# FOR SALE!

## Complete Cotton Mill Equipment

All or any part of cotton mill equipment given below for sale—immediate delivery.

1 Lowell Twister, 96 spindles, 4" ring, 5 1/4 ga., creels for 5 ply	20.00
1 Collins Twister, 96 spindles, 4 1/2" ring, 5 1/2 ga., creels for 6 ply	Spindle
2 Universal Cone Winders, No. 50 (each)	275.00
2 No. 5 Cone Winders (each)	125.00
1 Inman Brand Machine	15.00
8 Roving Boxes (each)	5.00
About 300 10" Roving Cans (each)	1.50
6 3-Gal. Fire Extinguishers	9.00
4 Knotters (each)	20.00
1 60 Horse Power G. E. Motor, type 1, Form L, 60 cycle, 220 volts, Apm. 100, with 12" pulley	\$ 825.00
1 15 Horse Power G. E. Motor, 60 cycle, 3 phase, 220 volts, auto starter	325.00
1 25 Horse Power G. E. Motor, 220 volts, 60 cycle, 1135 R. P. M., 10" pulley, Type C. C. L., with Westinghouse starter	475.00
1 Hand Feed Drill Press	100.00
1 Single Beater Atherton Breaker	1,400.00
1 Potter Atherton Finisher	1,000.00
1 Kitson Willowing Machine	275.00
11 40" Pettee Cards, 10" coil (each)	1,450.00
2 Head Pettee Drawing, 5 deliveries each (delivery)	10.00
1 12x6 Providence Slubber, 64 spindles, per spindle	30.00
1 8x4 Saco Water Power Speeder, 120 spindles, per spindle	18.00
1 8x4 Woonsocket Speeder, 128 spindles, per spindle	18.00
1 192 spindle Lowell Spinning Frame, 2 1/4" ring, 2 3/4 ga.	
2 Atherton Spinning Frames, 208 spindles, 1 1/4" ring, 2 3/4 ga.	
1 Lowell Spinning Frame, 208 spindles, 1 1/4" ring, 2 3/4 ga.	6.00
4 Lowell Spinning Frames, 144 spindles, 1 1/4" ring, 2 3/4 ga.	
1 Whitin Spinning Frame, 154 spindles, 2" ring, 2 3/4 ga. All spinning have creels for double rolling.	
1 6x5 Whitin Spooler, 60 spindles	7.50
1 6x5 Franklin Spooler, 40 spindles	7.50
2 Silver and Gay Ball Winders, 16 spindles each, from 3 to 9 ounce ball (each)	425.00

Prices on Pulleys, Belting, Shaftings, etc., sent on application.

All the above now being operated in Atlanta and can be inspected. Terms: Half Cash balance B-L attached.

## T. J. MONROE

Phone Ivy 1288

Atlanta, Ga.

## Septic Tanks and Closets

## Sewage Disposal Plants

CONCRETE BUILDINGS

CONCRETE WALKS

CONCRETE TANKS

SWIMMING POOLS

Anything in Concrete  
from Engineering to the finished job

*Prompt Efficient Service*

General Concrete Construction Co.

1218 Realty Building

CHARLOTTE, N. C.

## WHITIN MACHINE WORKS

ESTABLISHED 1831  
TEXTILE MACHINERY

Manufacturers of the following machines:

### COTTON MACHINERY

Opening	Drawing Frames
Conveying	Roving Frames
Distributing	Spinning Frames
Picking	Spoolers
Revolving Flat Cards	Twisters
Sliver Lap Machines	Reels
Ribbon Lap Machines	Quillers
Combing Machines	

### COTTON WASTE MACHINERY

Openers	Revolving Flat Cards
Pickers	Derby Doublers
Willows	Roving Frames
Card Feeds	Spinning Frames
Full Roller Cards	Spoolers
Condensers	Twisters
Special Spinning Frames	

### WOOLEN MACHINERY

Card Feeds	Condensers
Full Roller Cards	Wool Spinning Frames

### WORSTED MACHINERY

Cone Roving Frames

MAIN OFFICE AND WORKS  
WHITINSVILLE, MASS. U.S.A.  
SOUTHERN OFFICE CHARLOTTE, N.C.

# Function of the Textile School

(By W. H. Dooley, before National Cotton Manufacturers Association.)

Originally all textile work was done in the home under the direction and guidance of the parents, who imparted the necessary instruction. As communities became larger and cities sprang up, the textile work grew to be more than a family concern. There was a demand for a better grade of textile products and a larger production. This meant a greater supply of hand tools than was usually found in the home of the ordinary worker. As time went on some cloth workers became more proficient than others, established shops of their own, employed several workmen, and also some young men to learn the trade. They became quite important, and soon grouped themselves together under an organization called a "guild," and applied to the city for certain privileges.

The master cloth-workers naturally turned to the question of training workers, that they might have a high standard of workmanship. The cloth-workers' guild set up very definite standards for the training apprentices. They were obliged to serve seven years and masters supervised the work of the apprentices. The desire of the apprentice to become a master some day was the incentive for him to acquire a complete knowledge of the manufacture of cloth, not only in skill, but theory of materials, etc. Scientific knowledge of the trade at this time was very limited.

European countries saw many years ago that the most effective way of training textile manufacturers, agents, superintendents, overseers of rooms, and so on, was not by the crude rule of thumb methods of the mill alone, but by supplementing the mill experience with technical training. It has been proven many times abroad that knowledge obtained in a textile school is more scientific, better arranged and more practical than the knowledge that can be obtained in the mill alone, without the school.

Since the first textile schools took definite shape in Europe, it may be worth while to study the aim and organization of some of the typical schools. European textile schools aim to meet the needs of the local industries. The organization of the industries differ from the industries of this country, and the schools are correspondingly different. The importance of textile schools cannot be too highly estimated. They were the main pillars by which Central Europe textile industry maintained its competitive power in the foreign market. Cheapness of labor was not sufficient to attain this end; cheap labor must be taught, and taught well, or their work in the end costs more than that of more expensive hands, who possess high skill and a thorough understanding of their trade.

1896 a reorganization of the textile schools was made on the Con-special textile schools to produce the skilled artisans and foremen.

inent. The schools were divided broadly into classes: First, higher special textile schools intended for the training of the skilled manager, director and supervisor. Second, The aim of each textile school was more clearly defined than it had been previously. Instead of being a hodge-podge, the course of study was constructed so as to confine instruction to that branch of the textile industry which existed in that locality.

The financial assistance given by the different Governments in textile education enabled enormous progress to be made. Old models, charts, machinery, drawings and the numerous other essentials necessary for efficient instruction, were replaced and improved and more modern apparatus introduced. All schools have large staffs of lecturers and assistants; they have ample accommodation for lectures and class work in textile and allied subjects; schools are furnished with good libraries and reading rooms with current textile publications.

The first textile schools were not established in the United States until after the Centennial Exhibition in Philadelphia, when, on investigation, the superiority of European textile products was found to be due in a large degree to the textile schools. The workers, overseers and experts of the mills in this country were generally recruited from the mill centers of Europe.

Since the purpose of a textile school is to train specially to meet the needs of the textile industry, it is clear that, in order to be efficient in the largest sense of the word, the school must function with the needs of the industry. This means that every textile school should meet all the educational needs of the textile district in which it is located. A textile school in Europe with a native population and a strong apprenticeship system will have a slightly different course of study than that of one in the United States, with a large number of non-English speaking operatives, and a different industrial organization. The most efficient textile school is that which comes nearest to meeting all the needs well. Therefore before we are to determine the functions of a textile school, it is necessary to make a survey of the textile industry in this country, study the organization, and note the needs.

The textile industry of the United States today, in order to increase production and decrease expense, tends towards the uses of labor saving devices and power machinery, which in turn means a movement towards standardization and specialization of products, which involves a large organization. The organization is divided into two departments, production (manufacturing) and distribution (selling).

The production is carried on in mills varying in size from a large to a small plant, with a manager, agent or superintendent, overseers, second-hands and workers (skilled and unskilled). The manager or agent may and may not come from

the ranks. In the past it has been possible for men who were not graduates of a textile school, but who possessed good common sense and business capacity, to rise to this position. A manager or agent of a mill must have a great deal of foresight and will power. He must have initiative, an analytical mind, and executive ability; that is, he must be able to see clearly a problem, its solution, and have the ability to put the solution into effect.

The overseer and second hand usually come from the ranks of workers. They are the job masters and as such must be able to get good work out of the workers. This means they must have good judgment of human values, handling men. In addition, their outlook on life will be very different from that of the worker. They must have a habitual reaction to human reaction.

The skilled worker must have a clear mind capable of keen perception, and an inventive mind. The keen sense perception should be such as to do very accurate work.

A great many textile workers are of the unskilled class, simply machine tenders, whose only qualification is the ability of being dexterous. Any reflective action on the part of the semi-skilled worker retards the rate of production.

The progress of the textile industry in the past and today has been due to the efforts of scattered inventors and workmen, all laboring under great disadvantages. The progressive manufacturers of textiles are beginning to see that there are numerous possibilities of applying different scientific discoveries that have taken place. Competition compels us to realize that all textile industries have developed to a point where the working out of theory and practice has become a science, and that the application supersedes the old "rule of thumb" method, and demands the continuous employment of scientifically trained leaders and bureaus of research. The results of such bureaus will tend to lower the cost of production by eliminating manufacturing weaknesses, improving tools, and applying principles of science to raw materials, waste products, methods, etc.

Another great educational need is the training of the non-English speaking operative. We are just beginning to realize the problem of the education of thirteen million foreign-born people in this country, many of whom do not speak our language, do not come in contact with Americanizing influences, and are in a measure out of sympathy with the country's institutions. Heretofore we have looked to traditional school system, the influence of social contact, and city life to mold the recent immigrant and his children into American citizens. Experience shows that the mills must co-operate in educating these non-English speaking employees and the textile school should offer definite pedagogical courses for training teachers for this type of work in mills.

To summarize: The function of

a textile school in America today is to meet all the educational requirements of the textile industry. This means comprehensive courses for agents, experts, and research workers, and briefer and more practical courses for overseers and mechanics. In addition, special courses should be offered in the training of safety engineering and employment managerial work, and last but not least, the textile school should become an experiment station for the industry, the staff of teachers and the pupils investigating the problems of the trade.

## Reclaiming of Waste Cotton Perfected in Modern Georgia Mill.

Atlanta, Ga.—Like an oasis in the desert appear the mills and model village of Hillside, as one tops the hill after leaving LaGrange. After a sojourn in the land of cotton, where order and consideration for cotton as a staple is noticeable by its absence, one is refreshed by even a distant view of the ensemble of orderly buildings that have evidently been designed with an intention to treat cotton as a king, and to remedy the beggarly condition to which the staple has so far given evidence.

The establishments conceived by Fuller E. Calloway are renowned not only in this country, but in all cotton centers, as being the most perfect not only for the proper treatment of the cotton staple, but also for the well-being of the workpeople. This, one has heard and read, but a visit to the mills far surpasses one's expectations.

Here there is no waste. From the time the fiber enters the mill until the finished product leaves it, every scrap of the original cotton is utilized. And rumor has it that the waste or by-product of other cotton factories find their way here to be reclaimed, and sent out rehabilitated. Some to be again spun and woven into an inferior fabric, others to find service with the mattress makers, or perchance to be made into paper pulp.

The particular object of our visit was the desire to see the methods adopted for the reclamation of the various classes of cotton mill reject materials. Mr. Crane, the superintendent, since the inauguration of this machinery, some five years ago, avows that his idea was, and is still, to raise the cotton waste trade in all its branches to a higher moral level. And he can rest assured that he has attained his object, so far at least as the Valley Waste Mill is concerned.

All classes of cotton mill waste are dealt with, from the common, dirty picker droppings to the best of peeler combings. Each and every class of material is treated with the same care and cleanliness. The rooms and the machinery are kept up to concert pitch, clean and healthy. Naturally, the workers respond to such surroundings, and it is surprising to an old stager, who has seen waste handled in most parts of the cotton spinning world, to see

the class of workers as here represented.

One of the chief reasons for the sanitary surroundings and the contented looks of the workpeople is the minimum amount of direct handling the material receives. One sees, for example, the incoming bale of waste presented to a machine, there fed to an endless lattice on the machine, and nothing more is seen of the material until it has been packed into a new bale ready for re-shipment. One handling of the cotton suffices during the process of reclaiming and cleaning.

Threads are fed to the Garnett (or a battery of the machines), and automatically to the press, sufficiently clean for the mattress. On its emergence from the press as a soft and perfectly fluffy and fibrous material. Dirty picker droppings, full of dust and motes and trash are passed through a willow and are delivered away through the willow the material has dropped all the motes and trash, and not only has it done this, but the machine has automatically separated the refuse into three distinct grades.

Sweepings from the factory floor are received here just as they are swept up, and as yet no machine having been discovered to pick out the sundry objects that find their way into the mill sweepings bag, these sweepings are sorted by hand. This process, naturally one not noted for cleanliness, is at the Valley Mills conducted under conditions that would put to shame many weaving sheds. No dust, no dirt, no loose cotton about the floor. The work is proceeded with in an orderly manner, and the cotton is conscientiously separated, the good, the bad and the medium, the clean, and the oily.

To inspect this sorting room would prove a very valuable lesson to many cotton mill superintendents, and from its contemplation and the following of similar methods in their own mill, would result in the making of an additional dividend for their stockholders, and this without outlay, and with only a trifling amount of time. What does this class of waste contain to render attention to it in the making so important? Clean roving waste, good spinners under-clearers, even cotton from the lap- per room, and the card room, that could all have gone back to the original cotton mixing! Not only valuable cotton, but strange to say, quite an appreciable amount of empty spools and filling pins, which form quite a considerable revenue to the sorting party.

Nothing here is wasted, and at the same time every class of material is turned out from the mill in the same respectable package. It is no exaggeration to say that the reclaimed material, when ready for shipment, presents a better appearance than any bale of new cotton received at the spinning and weaving mill. All this is a sad commentary on the treatment that the virgin cotton receives here in the South from the time it leaves the field until it gets in the spinners' hands.—Daily News Record.

The Elements Aid Advertising.  
"I don't need to advertise," said the manufacturer of women's hos-

tery. "My customers always advertise my goods."

"But," argued the solicitor, "it doesn't always rain."—Exchange.

Riverside No. 3.

Pendleton, S. C.

H. H. Kelly.....Superintendent  
J. M. Gentry.....Carder  
J. J. Camp.....Spinner  
F. M. Andrews....Master Mechanic

## TURNER for CONCRETE

TURNER CONSTRUCTION CO., New York City

Southern Office—R. A. WILSON, Mgr.—Chamber of Commerce Bldg.

ATLANTA

# The Attractive Mill Village

is an important factor in securing labor.

THE tendency of the times is toward beauty—and it is universal. Formerly it was characteristic of the wealthy. Now it has found its way into the homes of all classes. The attractiveness of the home, its surroundings and the village as a whole, will play an important part in your labor problems of the future.

The interest of the mill demands *lasting qualities* in the construction of homes for its operatives.

Human nature demands *convenience* of arrangement.

*Comfort* is the inherent right of every human being.

Strictest *economy* at a time of high costs is highly essential in all construction.

**All These—Beauty, Durability, Convenience, Comfort, Economy**

are the principal features of

## QUICKBILT BUNGALOWS

Snug, attractive, well-planned, artistic, roomy little bungalows especially designed for attractive, industrial villages.

Built after the practical, thoroughly-proven Patented Garner Locking System, by which all sleepers, joists, panels, plates, rafters, etc., lock securely into each other, forming a type of substantial home that cannot easily be damaged and which will neither give, bend, crack, pucker nor warp, even under the greatest strain. Especially designed for the homes of bosses or operatives. The doubly secure process of erection warrants comfort, even in extremes of hot or cold weather.

QUICKBILT Bungalows are the most economical homes possible. They are made in large quantities according to patented methods in a systematic manner by a plant which covers the entire operation from the forest to the finished house. As a result with every short cut to perfection and economy afforded the cost of manufacture is cut in half and all extra middle-men's profits and commissions are avoided. They are sold direct to you from the forest.

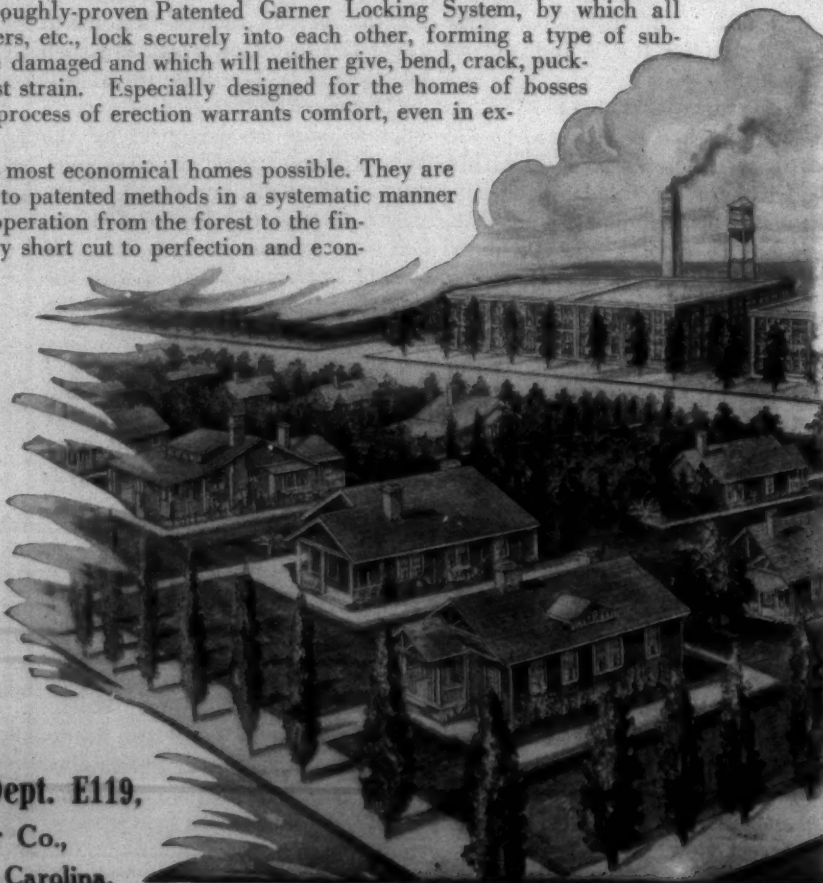
Arriving already built with nothing left but the erection, the labor usually necessary for construction is reduced to a minimum. There will be no piles of waste lumber left. Every waste in material, time, labor and money is avoided.

**The Most Logical, Modern, Practical, Economical Method of Home Building.**

For fuller explanation address

**QUICKBILT Bungalow Dept. E119,**

**A. C. Tuxbury Lumber Co.,  
Charleston, . . . South Carolina.**



# SOUTHERN TEXTILE BULLETIN

Published Every Thursday by  
**CLARK PUBLISHING COMPANY**  
Offices: 39-41 S. Church St. Charlotte, N. C.

DAVID CLARK.....Managing Editor  
B. ARP LOWRANCE.....Associate Editor  
J. M. WOOLLEY.....Business Manager

## SUBSCRIPTION

One year, payable in advance.....	\$2.00
Other countries in Postal Union.....	4.00
Single Copies .....	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

## ADVERTISING

Advertising rates furnished upon application.  
Address all communications and make all drafts, checks and money orders payable to Clark Publishing Company, Charlotte, N. C.

**THURSDAY, JUNE 10, 1920**

### The Textile Foundation.

At the recent meeting of the Southern Textile Association at Spartanburg, S. C., a very important step was taken in the decision to establish a Textile Foundation under the auspices of the Southern Textile Association. The object of the Textile Foundation will be to compile textile information from records and actual tests and distribute same throughout the textile industry of the South.

It is proposed that the Textile Foundation shall be operated by the Southern Textile Association with a fund to be contributed by the cotton mills or individuals and it is proposed to employ one or more high class men to devote their entire time to the work.

When F. Gordon Cobb of Lancaster, S. C. became president of the Southern Textile Association he started a great work through a system of questionnaires which were sent to every carder, spinner, weaver and master mechanic. The questionnaires asked the practical men of the mills to give their opinion upon many points such as drafts, speeds etc., and the answers were carefully compiled.

It was readily seen that there was a considerable difference of opinion upon almost every subject but when three-fourth of the replies were favorable to any one idea it was taken to be conclusive evidence that it was the correct view.

Not only was a great deal of valuable data compiled but it started the superintendents and overseers to studying and many of them have begun to make tests to determine for themselves the advantage or disadvantage of certain drafts, twists, etc.

The trouble, however, has been that they have not the time or proper system to take into consideration all of the factors that might affect the result of a test and such tests would be far more valuable if made under the direction of experts such as will be employed by the Textile Foundation. It is the purpose of the Southern Textile Association to have the Textile Foundation make systematic tests wherever desired and when satisfied with the results of the tests, to distribute the information among the mills.

A superintendent recently claimed that two processes of drawing would give stronger yarn than one process but the result of a series of tests showed that the yarn made with one process broke stronger than that made with two processes.

He then claimed that while the yarn from one process of drawing frames might be stronger it was not as even as that from two processes and based his argument upon the number of doublings. When, however, asked to select the evenest yarn from a number of samples he very readily picked out the samples of yarn made with one process of drawing.

Possibly with different staple of cotton and on different numbers the results would have been different but if, as some claim, one process of drawing will give stronger and even yarn than two processes, the information would save thousands of dollars to the mills both in labor and power.

We do not know that one process of drawing is as good or better than two processes nor are many mill men in position to state positively which will give the best results.

The experts of the Textile Foundations will have that as one of their problems and when they have compiled the results of hundreds of tests made under uniform conditions and the test made by single thread testing machines instead of the ordinary yarn testers, the mill men will have valuable data upon which to base opinions.

A mill manager recently suggested to his superintendent that he change the draft upon his cards from 95 to 125 but the superintendent claimed that the long draft would weaken the yarn. In such a case the tests and records of the Textile Foundation would be available to show which draft would give the best results.

The above are simply illustrations of the work that the Southern Textile Association intends for the Textile Foundation to perform.

There are hundreds of questions of draft, speed, twists, settings etc. that are of vital importance to the mills and when the superintendents and overseers through their organization take hold of these problems it will mean a saving of thousands of dollars to the mills through increased efficiency.

The Southern Textile Association has taken a great forward step through the formation of the Textile Foundation.

### Keeping Contracts.

A fearless, vigorous, aggressive man is apt to make enemies, who dislike him so intensely that they would kill him if they could get by with it. In spite of them he walks abroad, attends to his affairs, succeeds, and lives to a green old age, IF—if the germs don't get him. His very vigor and consequent activity, his going abroad and mingling with friends and foes, the strength of his appetites and passions, bring him into contact with enemies so small he cannot see them, which find lodgment and breed prodigiously within his own body and presently lay him low and take his life in its fullness.

Organized labor is a strong and vigorous body. It has been intensely active in affairs; it has in full measure the appetites and passions which it condemns in others. It

has enemies without who would fain put an end to its existence; in spite of them it lives and thrives. But it is breeding germs within itself, that threaten its very life.

There are the typhoid germs of red radicalism. Red is their color; inflammation is their business; they create a fever in the body of labor which instead of building, burns. When the blood is super-heated it cannot perform its natural function and the body wastes away. The more vigorous a body is, the more good blood there is in it, the greater the danger to it from fever. Full blooded, large bodied, passionate people rarely survive fever. If organized labor would live and thrive it must get rid of its fever germs.

Then there are the pale germs of contract breaking; they attack the vital organs and tissues of the body of labor, make it weak, and wobbly, and unreliable. Most of our physical bodily diseases come from contract breaking, when stomach, liver, heart, or lungs fail to fulfill agreed upon and expected functions. You will hear a suffering, weakening human explain his condition by saying: "My stomach has gone back on me." It has broken its contract.

Fever in the blood gives a false seeming of strength; a man in the delirium of fever appears to have the strength of five men. But it is destructive strength; each paroxysm saps natural strength. The pale, insidious, slow-working, tissue degenerating germ takes away even the seeming of strength. Such is the contract-breaking germ in the body of labor.

A man, or a group of men, who makes a contract and will not keep it, is a victim of degenerating weakness. "An honest man's word is as good as his bond;" that is because he is strong enough to keep his word. When the word of an organization of honest men takes the form of a contract, that word will be made good, if they are strong men. It takes a strong man to be honest. Dishonest, word-repudiating, contract-breaking men are weak men and weaken whatever cause they stand for.

The strike is a most effective weapon in the hands of strong men or organizations. It is indeed a deadly weapon. But weaklings cannot wield it. It has been brought into much and well-deserved disrepute recently and the principal reason is that those who tried to use it were in many cases contract breakers. It is stated that in one State, out of the strikes occurring, eighteen were in violation of contracts.

When a man or an organization contracts for a stated time to deliver a stipulated number of hours of good, honest work under specified conditions for a fixed wage, it must sacredly keep that contract or stand convicted of fatal weakness and dishonesty. That goes also for the party of the second part. Labor has a vast contempt for employers who break contracts; let it scrupulously keep its own. That way, strength and honor lie.—Greenville (S. C.) Daily News.

## Personal News

J. F. Shottles, formerly overseer of weaving at Lockhart, S. C., is now overseer of weaving at Eureka Mill, Chester, S. C.

O. H. Dunn has resigned as overseer of spinning at the Eva Jane Mill, Sylacauga, Ala., to accept position as superintendent of Danville Knitting Mill, Bon Air, Ala.

B. H. Wilson has resigned as overseer of spinning with marlboro Cotton Mills, McColl, S. C., and accepted position as overseer of spinning, spooling and warping with Winnsboro Mills, Winnsboro, N. C.

L. W. Misenheimer, master mechanic at the Woodside Cotton Mills, Greenville, S. C., has resigned to accept a position with the Republic Cotton Mills at Great Falls, S. C. His brother, G. W. Misenheimer, has been made master mechanic at the Woodside Cotton Mills.

T. B. Murphy, who has for the past twenty years been overseer of weaving and spinning and master mechanic in various mills in Georgia, Louisiana and Texas, has accepted a position in the weave room of Augusta Factory, Augusta, Ga. The Augusta Factory is the first mill he ever worked in.

### Superintendent Kills Wife and Self.

W. K. Davis, superintendent of the Marion Manufacturing Company, Marion, S. C., shot and killed himself after killing his wife in a New York hotel last Saturday, June 5.

### Textile Foundation Committee to Meet.

The committee on Textile Foundation named by the Southern Textile Association will meet Saturday, June 12, at 11 o'clock at the Selwyn Hotel, Charlotte, N. C. The committee is as follows: David Clark, chairman; F. Gordon Cobb, Lancaster, S. C.; W. M. Sherard, Whitmire, S. C.; C. W. Causey, Greensboro, N. C.; Marshall Dilling, Gastonia, N. C.

### They Were There.

Last Friday A. B. Carter, secretary of Southern Textile Association, came into our office accompanied by John E. Humphries of Dry Ring Traveler Company, and George Witherspoon of Spartan Sizing Compound Company (some accompaniment) and made statement that he read over entire list of those present at Spartanburg and did not find the names of the above two gentlemen and that he wanted to make affidavit that they were present.

He made the affidavit and explained to a certain extent why these men could not sign the attendance cards. A. B. told us some other things regarding these two gentlemen and their visit to Spartanburg but they made special request that this information be omitted from the pa-

per. Anyone wanting further evidence may communicate with Mr. Carter by mail.

### Dacotah Cotton Mills.

#### Lexington, N. C.

A. Frank Bruton....Superintendent  
W. T. Byrd.....Carder  
C. L. Williams.....Spinner  
W. M. Callaway...Beaming & Slash'g  
Walter Richardson.....Weaver  
R. R. Stovall...Asst. Supt. & Cl. Room  
G. L. Cope.....Dyer  
A. L. Crissman.....M. M.

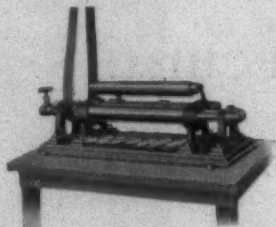
### Hogansville Division—International Cotton Mill.

#### Hogansville, Ga.

D. G. Reid.....Superintendent  
W. L. Martin.....Carder  
W. H. Hartley...Spinning, Spooling,  
and Twisting  
Ed McGee.....Weaver  
R. C. Birdsong.....Cloth Room  
W. H. Smith.....Master Mechanic

### Texas Cotton Mill. McKinney, Texas.

W. M. Mashinie.....Superintendent  
W. B. Hollingsworth.....Carder  
A. M. Cox.....Spinner  
A. M. Cox.....Spinner and Slasher  
D. B. Boothe.....Weaver  
O. D. Fredrick.....Cloth Room  
M. T. Massingill.....Dyer  
E. Bartholomew.....M. M.



**DO YOU?**  
junk your rolls when  
the surface gets rough?

**DO YOU**  
junk your linen collar  
when it gets rough?—  
you have it *ironed*.

Then  
**Why Not**  
*Iron Your Rolls*

**The SIMPLEX**  
Roll Calendering Machine

will soon pay for itself and make  
money for you by saving your  
rolls and improving your yarn.

*Write for full particulars*

Simplex Roll Calendering Machine Co.  
ANNISTON, ALA.

## Bleached Goods

(SELLING POINTS XXIII)

Have your goods specially  
desirable qualities?

Are they stronger, of fast  
color, with more elasticity  
and softness than the other  
fellow's?

If so, a trade mark, ex-  
pressing this, will be worth  
a dozen salesmen.

If not, the most stunning  
trade mark will be worth-  
less.

You need talking points  
backed by facts. None better  
than those above. Easily  
produced by Peroxide bleach-  
ing.

Technical advice free to  
mills.

**The Roessler & Hasslacher Chemical Co.**

41st Street & Sixth Ave., NEW YORK, N. Y.

## Employers Liability Insurance

Exclusively for—

**Cotton Yarn and Hosiery  
Mills of the Southern States**

**Millers Indemnity  
Underwriters**

**Bailey & Collins, Managers**

On a mutual plan not subject under any circumstances  
to the contingent liability of assessment. Your maxi-  
mum cost is absolutely fixed.

**Safety, Service then Savings**

If your present liability insurance policy is not  
entirely satisfactory, write our

**Greenville, S. C. or Atlanta, Ga.**

**OFFICE**

# MILL NEWS ITEMS OF INTEREST

**Charlotte, N. C.**—Barnhardt Manufacturing Company are building a \$45,000 brick and concrete addition to their mill.

**Lexington, N. C.**—Dacotah Cotton Mills will build 192x54 foot addition to their mill for spinning and slasher rooms.

**Goldsboro, N. C.**—Borden Manufacturing Company has increased capital stock from \$300,000 to \$2,000,000.

**Gaffney, S. C.**—Hamrick Mills have increased capital stock from \$250,000 to \$500,000.

**Maiden, N. C.**—Victory Spinning Company has been incorporated with a capital stock of \$600,000 by H. S. Robinson and Lewis Rudisel of Lincolnton, N. C., and G. W. Rabb of Newton, N. C.

**Newton, N. C.**—The City Cotton Mills, recently noted as incorporated with capital of \$500,000, will have plant equipped with 5,000 spindles manufacturing 40s to 60s cotton yarn. Production is expected to start October 1. E. S. Shelby is president and F. L. Newby is treasurer.

T. R. Morton has resigned as superintendent of the Martinsville (Va.) Cotton Mill and accepted a similar position with Henry River (N. C.) Manufacturing Company.

J. C. Keller is now superintendent of the Vance Cotton Mills, Salisbury, N. C.

**Fayetteville, N. C.**—The Tolar, Hart and Holt Mills, and the Holt-Williamson Manufacturing Company have installed a complete equipment of Select-O-Phone, automatic interior telephone and call system manufactured by the Screw Machine Products Corporation, Providence, R. I.

## Inman Pays 400 Per Cent.

**Spartanburg, S. C.**—Inman Mills, of which K. A. Chapman is president and treasurer, have decided on a stock dividend of 400 per cent, 300 per cent to be in common stock and 100 per cent in preferred.

This is the largest stock dividend that has yet been paid by any Southern cotton mill. The present capitalization is \$350,000.

Announcement was also made this morning that directors of the Marion, N. C., Mills of which D. D. Little of this city, is president and treasurer, have declared a cash dividend of 60 per cent payable at once.

Stockholders of the Saxon Mills met today and ratified the action of the directors in declaring a stock dividend of 200 per cent.

Stockholders of the Clifton Mills also met today and ratified the action of their directors in declaring a stock dividend of 100 per cent. This mill also paid a cash dividend of 46 per cent.

## E. S. DRAPER

CHARLOTTE

NORTH CAROLINA

LANDSCAPE ARCHITECT  
and CITY PLANNER

MILL VILLAGE DEVELOPMENT

## MEES & MEES ENGINEERS

Transmission Lines, Municipal Improvements  
Highway Engineering

Steam and Water Power Plants

Surveys, Reports, Design, Supervision of Construction  
310 Trust Building

CHARLOTTE, N. C.

## High Class Investment Securities

*List on Request*

Bond Department  
American Trust Company

CHARLOTTE, N. C.



This TRADE MARK on your Belting indicates that the greatest care, thought, and precision have been observed in its manufacture.

In other words, it is

CLEAN QUALITY

TROUBLE FREE

## Charlotte Leather Belting Company

Charlotte, North Carolina

## Goods Not Going into Consumption Quickly Enough.

Manchester, Eng.—Some in the English trade are evidently rather disturbed because they understand that goods are not going into consumption as rapidly as they are sent out, "although, in many cases, the unrequired articles are much cheaper than those now in process." Another point for particular concern here seems to be that the mills in various European centers are again at work on a fairly large scale.

These fears were discussed by the Times Trade Supplement, as follows:

If the mills which spin and weave cotton were to stop from any cause, the price of piece goods would rise immediately, but throughout the anxieties of the wage negotiations which have now terminated successfully few people bought in view of that contingency. For a long time now, except in special lines of goods of the highest quality, the market has been dull.

An awkward fact which has recently come into prominence is that in more than one large market abroad goods are not going into consumption as rapidly as they are sent out, though in many cases the unrequired articles are much cheaper than those that are now in process of manufacture. Another disquieting truth is that in not a few retail establishments in this country cottons are on offer at rates which are not higher than current mill prices. No one need be surprised to learn that under these influences cloth prices, in some, though not in all quarters, show a tendency to decline. Probably the fall would have been more marked than it is but for the certainty that from an early date the wages bill of every mill will be considerably increased. During the negotiations, which were presided over by Sir David Shackleton, the representatives of the employers committed the trade to the payment of largely increased wages, and nothing is more certain than that these increases will have to be borne by the purchasers of yarn and cloth.

Evidence is forthcoming from day to day that many manufacturers are pushing ahead of their engagements for the delivery of goods three or four weeks in advance. Another point which must not be overlooked is that foreign mills are once again at work (France is particularly active) and are lessening the monopoly which England has enjoyed for a considerable time. Indeed we have returned to the days when there are complaints that ships leaving Continental ports for distant lands are nearly full of goods before they reach English ports. One effect is that English goods are not carried with the regularity that a sound system of trading demands. There are periods when they do not go at all, followed by periods when they are crowded on to ships which, on arrival at their destination, overload the markets.

### Increased Production by Cotton Yarn Users Might Mean Higher Prices.

Philadelphia.—Since cotton yarns have not responded fully to the unorganized campaign for lower prices, some manufacturers are beginning to believe that the solution of the reduction problem lies in curtailment of consumption rather than in increased production, and this phase of the situation is receiving very careful study.

Increased production, it is pointed out, can be had only at the producer's hazard, and, furthermore, is not possible with the present shortage of help and the disposition to limit output for giving employment to the greatest number of persons.

In the present state of the market, with loans restricted, and buyers deferring operations, it is urged, it would be very dangerous, from the standpoint of the manufacturer, to produce more than is being absorbed. Accumulations of stock, as is shown by experience, would afford distributors opportunity for dictating prices and terms to mills in need of funds and unable to borrow from banks.

There is a question, too, whether any material speeding up for increasing output would not tend toward higher prices. It is reasoned that with the first show of activity yarns would advance, and that it is not improbable that any crowding of production would be the signal

for wage increase demands.

Curtailed consumption, it is argued, would be nothing more than a duplication of what has been going on, as between jobber and manufacturer, for some weeks. The effect, it is held, would be to bring about an accumulation of raw materials, with offers of lower prices at the source, leading eventually to a keener interest among manufacturers and a buying of yarns as soon as it might be assumed prices had reached the bottom. The maximum depth would not be witnessed, however, so long as consumption were held in check.

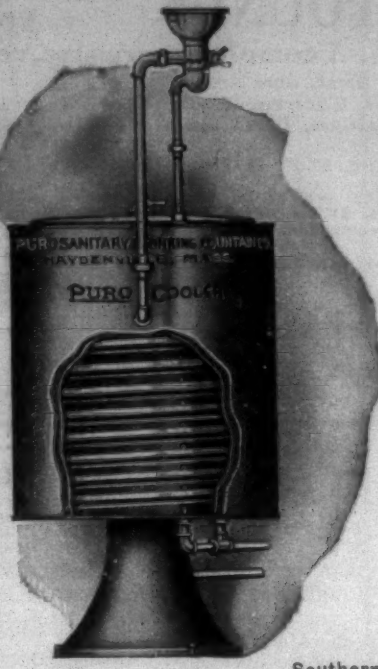
### "Greater Lory" Held Community Celebration.

Another chapter in the development of "Greater Lory" was added by the celebration and flag raising held at Gastonia, N. C., Friday, June 4.

Capt. R. G. Cherry, mayor of Gastonia, and Rev. E. P. Stabler, pastor of West End and Franklin Avenue Methodist churches, were the principal speakers. Mayor Cherry was introduced by Rev. Edgar Moore. Throughout the course of his speech Mr. Cherry stress the value of the playground in childhood development, also laying special emphasis upon our appreciation of our flag, whether it be here or abroad.

At the conclusion of Mr. Cherry's address, Rev. Mr. Moore introduced Rev. E. P. Stabler, who made a very appealing talk on the principles of the flag, interpreting those principles as freedom and righteous doing.

The mill was closed for the event and quite a number of Lory people assembled. Music was furnished by the Lory Concert Band.



The late ex-President  
Roosevelt's motto was  
**Be Prepared!**

Anticipate your warm  
weather requirements and  
order

**Puro Coolers  
NOW  
DON'T DELAY.**

40 Feet Coil Pipe—  
Cover with locking device  
and rubber washer, making  
an air tight Tank—equipped  
with PURO Sanitary Drinking  
Fountain.

**Puro Sanitary Drinking  
Fountain Co.**  
Haydenville, Mass.

Southern Agent  
**E. S. PLAYER, Greenville, S. C.**

**THE AMERICAN AUDIT COMPANY, New York City**

F. W. LAFFENTZ, C. P. A., PRESIDENT

Our Reports of Audit and our Certificates of Condition and operations,  
are known and have weight in the financial centers of the world.

**ATLANTA BRANCH**  
1013 Fourth National Bank Building  
ATLANTA, GA.  
C. B. BIDWELL, C. P. A., RESIDENT VICE PRESIDENT

**SAVE YOUR WASTE PAPER**  
Bale It—We Buy It.  
**CAROLINA JUNK & HIDE CO.**  
Box 98 Phone 74  
Charlotte, N. C.

**Screw Machine Products**  
for Textile Mills and allied  
Industries. We make Special  
Shaped turnings in steel or  
brass.

Send samples or Blue Prints  
for quotations. Please state  
quantities ordered.

**SHAMBOW SHUTTLE CO.**  
Woonsocket, Rhode Island



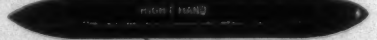
**THE  
"NO-WASTE"  
ROVING CAN**

Made of Seamless Hard Fibre

**Prevents Your Waste and  
Broken Ends**

The "NO-WASTE" Seamless Roving cans  
have a reputation for quality and smoothness  
wherever roving cans are used. Practical  
experience has taught mill men in all sections  
of the country that ultimate economy can be  
achieved only with an equipment of "NO-  
WASTE" Seamless cans.

**STANDARD FIBRE CO.**  
25 Miller Street Somerville, Mass.




**DAVID BROWN CO.**  
Successors to  
**WELD BOBBIN AND SPOOL COMPANY**  
**LAWRENCE, MASS., U.S.A.**  
MANUFACTURERS OF HIGH GRADE

**Bobbins, Spools, & Shuttles**  
For Cotton, Woolen, Silk, Knitting  
and Carpet Mills

We make a specialty of  
Hand Threading and Woolen  
Shuttles. Enamelled Bobbins  
and all kinds of Bobbins and  
Spools with Brass or Tin  
Re-inforcements.

Write for quotations



**THE CHOICE OF A HUMIDIFYING SYSTEM**

must be one that for simplicity with great capacity and economy in maintenance produces uniformly such conditions that may be determined for the different requirements of the work. In the American Moistening Company's method of humidifying, all such requirements are GUARANTEED.

Our COMINS SECTIONAL HUMIDIFIERS  
Our FAN TYPE and HIGH DUTY HUMIDIFIERS  
Our VENTILATING Type of Humidifier (Taking fresh air into the room from outside)  
Our ATOMIZERS or COMPRESSED AIR SYSTEM  
Our COMPRESSED AIR CLENGING SYSTEM

Our CONDITIONING ROOM EQUIPMENT  
Our AUTOMATIC HUMIDITY CONTROL (Can be applied to systems already installed)  
Our AUTOMATIC TEMPERATURE CONTROL  
Are all STANDARDS OF MODERN TEXTILE MILL EQUIPMENTS.

**AMERICAN MOISTENING COMPANY**  
BOSTON, MASS. FRANK B. COMINS, Vice-Pres., Treas. and Gen. Mgr.  
SOUTHERN OFFICE, Atlanta Trust Company Building, ATLANTA, GEORGIA

WILLIAM R. WEST, President

# TALLOW—OILS—GUMS—COMPOUNDS

**TEXTOL, A new product especially for Print Cloths. A complete warp size, requires no addition of tallow**



Tallow, Soluble Grease, Soluble Oils, Gums, Glues, Gum Arabol, Lancashire Size, Waxes, Finishing Pastes, Soaps, Glycerine, Ready-made eavy Size, Sago and Tapioca Flours, Dextrines, China Clay, Soluble Blue Bone Grease, Bleachers' Blue.

**SPECIAL COMPOUNDS FOR WARPS, WHERE STOP MOTIONS ARE USED.**

**WEIGHTING COMPOUNDS FOR COLORED AND WHITE WARPS. FINISHING COMPOUNDS FOR ALL CLASSES OF FABRICS.**

The Arabol best grades of cotton warp sizing compounds make the "finest weaving and will hold the fly."

These compounds are based on the best practical experience and the best materials used in their manufacture.

## The Arabol Manufacturing Co.

Offices: 100 William Street, New York.

Southern Agent: Cameron MacRae, Concord, N. C.

R. P. GIBSON, South Carolina Agent, Greenville, S. C.



Factories: Brooklyn, N. Y.

GUY L. MELCHOR, Ga., Ala. and Tenn. Agent, Atlanta, Ga.

### New Scale Catalog.

The American Kron Scale Company has just issued a new catalog which is of especial interest to cotton mill men. It is illustrated with scales for every purpose and shows how they may be installed. All Kron Scales are automatic and springless and for quick, accurate weighing all that is necessary is to "Load and Look." One of the impressing features of the catalog is the preface written by Mr. Ohnell, president of the company, and is as follows:

"Prosperity for all depends on production.

"Abundance of work at good wages is dependent on the purchasing power of the public. This is the most important problem in our industrial life today and can only be solved by eliminating all waste.

"Modern equipment, time and labor saving devices, together with an honest day's work by everyone, are the only means whereby we can reach the desired result."

This catalog will be sent upon request to the company at 430 East 53rd St., New York.

### Some Mills Reported Busy Throughout December.

Between two seasons the woolen and worsted trade is finding time to speculate on its next opening, scheduled in July, when it is thought by optimistic mill owners appreciable new orders will develop. Mill representatives who have experienced only slight cancellations on the delivery of light weights feel the present cancellation of goods will not go beyond this season.

Some of the largest manufacturers of piece goods report, contrary to cancellations on deliveries for spring, orders booked that will keep the mills busy until the end of December. With the usual number of orders for next season on the books in July, these manufacturers expect unusual business for some time.

As to prices on future production there seems to be only one way of viewing the matter, according to manufacturers, who are cheerful in spite of continual grumbling about cancellations.

"Prices are going higher," says one of the favored group.

The man talking has charge of

buying office equipment for one of the largest woolen concerns in the country.

"It's my experience," he said, "to find everything higher than a short time ago. Paper, chairs, desks and supplies of all kinds have made noticable advances. It seems to be generally the case.

"We would gladly welcome lower prices, but how can this be expected when the mills will in a few days meet another wage increase?

"Yarns have gone up on the average of 50 cents in most cases, and unless the recent break in wools has lasting effects there will be little hope in raw materials bringing prices down. However, people will have to buy cloth, and a certain amount of the best worsteds will always find a market."

### Strickland Cotton Mills.

Valdosta, Ga.

W. E. Malloy.....Superintendent  
J. T. Brooks.....Carder  
G. E. Malloy.....Spinner  
J. L. Stephenson.....Weaver  
J. L. Camson.....Cloth Room  
W. A. Malloy.....Master Mechanic

### Fitzgerald Cotton Mills.

Fitzgerald, Ga.

J. H. Mayes.....Superintendent  
J. F. Greek.....Carder  
H. F. Hurt.....Spinner  
E. L. Nunnery.....Weaver  
R. R. Dollar.....Cloth Room  
W. B. Dorminey.....Master Mechanic  
E. S. Greek.....Outside

### Nokomis Cotton Mills.

Lexington, N. C.

A. Frank Bruton.....Superintendent  
T. A. Swing.....Carder  
T. T. Goings.....Spinner  
G. W. Chaney.....Slasher  
G. W. Chaney.....Weaver  
Walter Yarborough.....Cloth Room  
M. W. Pruitt.....Master Mechanic

### Southern Mfg. Co.

Athens, Ga.

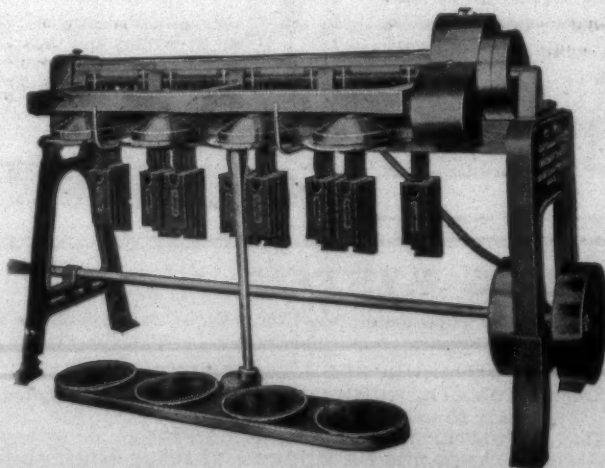
R. S. Pond.....Asst Mgr.  
T. J. Ross.....Supt. Spinning  
Geo. Herring.....Slasher  
D. N. Bishop.....Supt. Weaving  
Tom Chappell.....Cloth Room  
A. L. Howland.....M. M.

# SACO-LOWELL SHOPS

## TEXTILE MACHINERY

### Complete Waste Reworking Plants

ROGERS W. DAVIS, Southern Agent  
CHARLOTTE, N. C.



STANDARD DRAWING FRAME

# A Display of Better Efficiency

Situated in one of the best cotton mill centers of the South are several mills in close proximity to each other. So far as the mills were concerned one was about equal the other. Each had about the same number of spindles and about the same construction of building located in relatively the same natural surroundings but one of the mills bore the distinction of making more money than the others, the yarn was of better quality and production was greater. There was also another noteworthy distinction about this mill. More of the people attended church than at any two of the other mills put together. Almost everyone in the village attended one of the several churches. Another very noticeable distinction was that every employee of this mill and inhabitant of the village dressed better and looked cleaner and healthier than those of the other villages. This was made possible by clean premises and houses equipped with sewer system, baths, etc.

Have we a simple coincidence? If that is true then there should be a coincidence like this—that a group of mill employees who have not the sanitary conveniences and who do not attend church and care not for their personal appearance are better employees because their time and thoughts are devoted to their work and the spinning of better yarn. But such a coincidence cannot be found.

Or it might be argued that the prosperity of the better mill might have promoted a cleaner, healthier, more industrious populace, or that their parents had trained them so.

Or it might be explained this way, that a mill worker who is interested in his spiritual, and moral self will, other things being equal be a better worker than the man who care little for the church and who cares nothing for a bath or his personal appearance but who spends most of his spare time in loafing, fishing and gossiping.

This last explanation agrees with all observations of mill life and is also true to reason. The employer who provides for his employees a clean village, churches, good homes, plenty of clean water and a good sanitary system including baths finds that the quality of product and also production are better.

In a village so equipped the people are healthier and have a better appearance which is elevating to all those with whom they come in contact. It is also a known fact that the mill man who works not only with his muscle and brain, but with his heart and conscience is bound to display an efficiency and to be rewarded with a success which would otherwise be impossible.

**SOUTHERN STATES SUPPLY CO.**  
Columbia, S. C.

**THE CAHILL IRON WORKS**  
Chattanooga, Tenn.

**THE LOWRY COMPANY**  
Atlanta, Ga.

**VIRGINIA-CAROLINA SUPPLY CO.**  
Richmond and Norfolk, Va.

**JOSEPH A. VOGEL COMPANY**  
Frost-Proof Closets  
Wilmington, Del.



The Standard of Excellence for  
Electrical Installations  
IN TEXTILE MILLS AND  
VILLAGES

HUNTINGTON & GUERRY, Inc.  
GREENVILLE, S. C.

**IF YOUR SPINNING IS NOT PERFECT, WE CAN  
IMPROVE IT**

**National Ring Traveler Company**  
Providence, R. I.

Southern Representative:  
C. D. Taylor, Gaffney, S. C.

## EXPERT COTTON MILL PLUMBERS

**WALKER ELECTRIC & PLUMBING CO.**

Specialists in Cotton Mill and Village Electrical,  
Plumbing and Heating Installations.  
Atlanta, Rome and Columbus, Ga.

PNEUMATIC WATER SYSTEMS

Phone 516

**M. L. GANTT**  
COTTON MILL PLUMBING AND HEATING  
ESTIMATES CHEERFULLY FURNISHED  
SALISBURY, N. C.

**Belcher Heating and Plumbing Co., Inc.**

Special Cotton Mill Plumbers and Steam Fitters  
ATLANTA, GA.  
LET US ESTIMATE ON YOUR WORK

**STEPHENSON CO.**

Plumbers & Heaters  
ATLANTA, GA.

**JAS. DOAK**

SPECIAL COTTON MILL PLUMBING AND HEATING  
ASK FOR ESTIMATES  
GREENVILLE, S. C.

**E. L. STALLINGS COMPANY**  
SPARTANBURG, S. C.  
PLUMBING AND HEATING

Cotton Mill and Mill Village Plumbing and Heating. Estimates Sent on Application  
Bath Tubs, Lavatories, Water Closets, Sinks, Boilers, Pipe and Fittings  
Low Pressure Steam and Hot Water Heating Boilers and Radiators

Puro Sanitary Drinking Fountains and Coolers  
 Safety First Playground  
 First Aid and Signs  
 Stuebing Lift Trucks  
 Stanley Imported Solid Woven Cotton Belting  
 B. Messina's Sons—Burlap

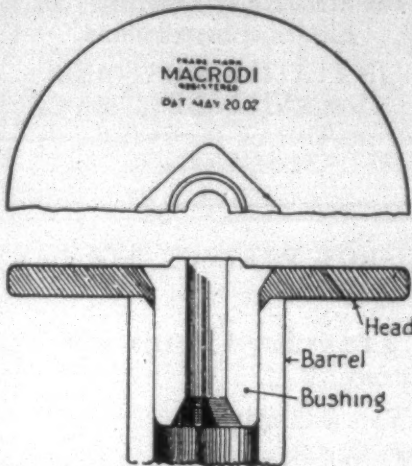
## E. S. PLAYER

### Manufacturers' Agent

### GREENVILLE, S. C.

*Inquiries will receive our best attention*

Morehead Back-to-Boiler System, Condensation Drainage  
 Portable Machinery Co.  
 Portable Scoop Conveyors  
 Gardner Governor Co.—Pumps and Air Compressors  
 East Jersey Pipe Co.—Hercules Hydro Extractors



## The Macrodi

### FIBRE HEAD WARP SPOOL

after fourteen years of the hardest mill use has demonstrated that it is

### Durable — Economical

Write for particulars of the added traverse with corresponding increase in yardage—an important feature of this spool.  
 Prompt deliveries in two to three weeks after receipt of order.

**MACRODI FIBRE CO.**  
 Woonsocket, Rhode Island

## B. & L. Bleachers Bluings

SHADE TO SUIT

Manufactured by

**BOSSON & LANE**

Works and Office

ATLANTIC, MASS.

CAL C. WALKER

S. A. TOMPKINS

## Walker-Tompkins Company

Plumbing and Heating Contractors

LET US FIGURE YOUR MILL AND VILLAGE

11 West Fifth Street

CHARLOTTE, N. C.

### Spartanburg Rotarians Visit Pacolet County Textile Association Organized.

(Continued from Page 17.)

There are three school buildings in Pacolet Mill village. They are under the general supervision of Miss Katherine Dozier. About 500 children attend these schools. The closing exercises were held last Friday night so the visitors were unable to have the opportunity of seeing the school in session. However, it was noted that the buildings were model school houses in every way. Twelve teachers are employed. Young ladies and young men finishing at Pacolet Mill schools are able to enter college. A splendid feature of the training here is the work in the domestic science department under the direction of Miss Belle Fuller. The luncheon the Rotarians enjoyed so much yesterday was prepared by these young women under Miss Fuller's supervision.

Upon entering the company store Mr. Montgomery told his guests to look around and see if they saw anything marked too high. He said that the store was not run as a money-making proposition. If a man could not go in it and sell goods lower than merchants who had to pay high rents, he said that man would be told quickly that he was not the man the company was looking for. The Pacolet Mill store is in charge of Mr. J. C. Thom, an Irishman of the purest type, claiming County Cork as his home. The mill store is a two-story building 225 feet in length by 50 in width. A stock valued at \$360,000 is carried. The sales last month amounted to about \$31,000. Everything man needs from the cradle to the grave is sold.

### Spend Month in Arkansas.

Jack Iler of the Keever Starch company and C. B. Iler of the Baltimore Belting Company are spending a month at Hot Springs, Ark.

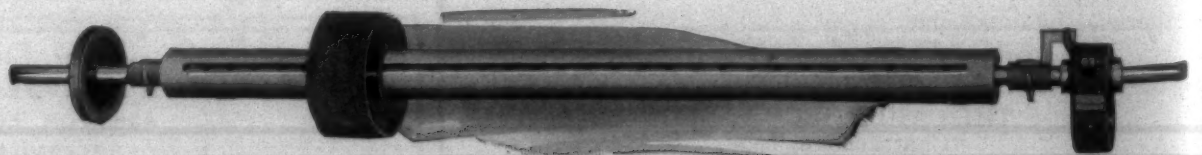
An organization known as the Rutherford County Textile Association was organized at the Florence Mills Welfare House, Forest City, last week. The following officers were elected temporarily: Mr. T. B. Stevenson, superintendent Henrietta Mills, president, and Miss Virginia Graham, secretary. The purpose of the organization is to form a county wide textile association composed of mill superintendents, overseers, mill officers and welfare workers, who can meet two or three times a year, at night in different welfare houses to discuss their problems and have social evenings together. This should mean much for the textile industry of the county.

The following welfare workers and superintendents attended the welfare meeting at Forest City Thursday afternoon: Misses Virginia Graham, Elen Erwin, —, —, Justice and Mesdames Guy Carswell, C. A. Ford, I. B. Covington, S. A. Summey, W. S. Moore and M. Hendrick.

The meeting was presided over by County Superintendent of Welfare R. E. Price, Mr. E. F. Carter, executive officer of the State Child Welfare Commission, Raleigh, was present and made an address on play grounds, better mill conditions such as ventilation, fire escapes, safety elevators, better health, etc. It was a very helpful address and full of good suggestions. A round table discussion followed Mr. Carter's address.

Tasting and delightful refreshments were served by Miss Justice, Mesdames Ford and Covington. The meeting adjourned to meet again at the call of the officers, time and place to be decided by them.

# Textile Grinding Machinery Of All Kinds



Send in Your Old Grinders to be Repaired

Southern Agent, E. M. Terryberry, C-o Howard Bros. Mfg. Co., 1126 Healy Bldg., Atlanta, Ga.

**B. S. ROY & SON CO., WORCESTER, MASS.**

Established 1868

# NATIONAL GUM & MICA CO.

910-11 Commercial Bank Bldg.

Mikah Tallow

Swiss Gum

Combination B



CHARLOTTE, N. C.

W. M. FAILOR, Manager

Factory and Works:  
9th St. and 11th Ave. New York City

## Humidity in General.

(Continued from page 16.)  
much to do with its development as a textile nation, if such a term may be used.

Today the manufacturer selects the site most suitable to his purpose and supplies the deficiencies. He builds a spur track. He harnesses his plant to a water-power miles away, and vitalizes it by wire. He conditions the air artificially.

Good authorities state that in the order named: wool, silk, flax and cotton vary in their capacities for absorbing moisture, being greatest in the case of wool and least in cotton.

It naturally follows that, for a given atmospheric condition, the regain will be in the same order. On the other hand, while in the process of manufacture, cotton is the most sensitive to atmospheric changes and requires the highest relative humidity for the successful manipulation of the fibres. The other fibres follow in the reverse order. When it is remembered that cotton is grown in a warm climate with a mean temperature of about 75 degrees F., the careful attention that it requires will be well understood, especially if the conditions are changed by shipment to a different climate.

"Cotton is composed of an infinity of very close filaments, stuck or held together by waxy or gummy substances. These substances are contained in a woolly, denticulated fibrous envelope surrounding the true fibre, and they play a very important part in the process of manufacture. When cool they are quite hard, but become softer and softer at every degree rise in temperature up to an average of 180 degrees, at about which point they melt.

"This explains why the use of steam alone may have a disastrous effect on the cotton, due to overheating,

although a certain amount of heat enables the process of manufacture to be carried on with ease and success."

Where the natural or manufacturing conditions are such as to divest the cotton of its natural percentage of moisture, for successful manipulation, it is necessary that proper provision be made for restoring to the bres their original and natural amount of heat and moisture.

Too dry or too hot conditions cause the fibres to radiate from the centre and produce what is called "oozy yarn."

There seems to be no doubt, then, of the necessity of proper atmospheric conditions. The right temperature and the right amount of humidity are needed to warm the fibre, to kill the electricity, and to prevent waste and broken ends.

The modern fire-proof mill, with its highly developed machinery, driven at such tremendously high speeds, contains much more static electricity than its small-windowed, thick walled, oil-soaked predecessor. This adds to the difficulties of the manufacturer, and is direct evidence that every step in advance brings with it, its special problem.

Tolar, Hart &amp; Holt.

Fayetteville, N. C.

H. C. Duffer ..... Superintendent  
A. Cooper ..... Carder  
C. M. Graddy ..... Spinner

Corsicana Cotton Mills.

Corsicana, Texas.

J. H. Hook ..... Superintendent  
J. P. Thompson ..... Spinner  
Will Elliott ..... Slasher  
Sam Bondurant ..... Weaver  
Harley Holloway ..... Cloth Room  
"Doc" Edmondson ..... M. M.

LOOM-LUBRIK TWISTER RING GREASE MYCO FLUIDO  
MYCO GREASE SIZE REMOVOIL

MASURY-YOUNG COMPANY

62 Years in Business

BOSTON, MASS.

Disinfectants, Spot Removers, Greases, etc.

AMERICAN TEXTILE BANDING CO., Inc.

Manufacturer

Spindle Tape  
AND  
Bandings



Belfield Ave. and Wister St., Germantown, Phila., Pa.

## Southern Hosiery Mills

famed for the quality of their product use for Sulphur Black Dyeing

"AMALIE" SULPHO TEXTOL OIL

highly recommended for light shades as well, and can be used either direct in the dye bath or in the last rinse, or both.

"AMALIE" SULPHO TEXTOL OIL

greatly enhances the shade or color and produces a maximum degree of softness.

Send for barrel on approval with special formula.

L. Sonneborn Sons, Inc.

Textile Products Division

262 Pearl Street

New York City, N. Y.

## There's a Felton Brush for Every Use in The Mill



We refill Spiral top flat cylinder brushes and can give prompt service



D. D. FELTON BRUSH CO.

S. A. FELTON & SON CO.,  
Manchester, N. H.

ATLANTA, GA.

## THOSE STEEL ROLLS

ARE THEY GIVING YOU TROUBLE IN ANY WAY? THEN LET US OVERCOME THOSE TROUBLES.

We will re-neck, re-flute, stone, polish, hone, etc., and put in first-class condition.

Satisfaction Guaranteed.

SOUTHERN SPINDLE &amp; FLYER CO., Inc. Charlotte, N. C.

Manufacturers, Overhauled and Repairers of

COTTON MILL MACHINERY

W. H. Monty, Pres. and Treas.

W. H. Hutchins, V. Pres and Sect'y

## BOBBINS and SPOOLS

True running warp bobbins  
a specialty

The Dana S. Courtney Co.,  
Chicopee, Mass.

Southern Agent,

A. B. CARTER,

Greenville, S. C.

## A. M. Law &amp; Co.

SPARTANBURG, S. C.

## BROKERS

Dealers in Mill Stocks and other

Southern Securities.

## SOUTHERN COTTON MILL STOCKS

For Week Ending June 8, 1920

	Bid	Asked
Abbeville Cotton Mills.....	250	—
American Spinning Co.....	420	—
Anderson Cotton Mills, com.	—	230
Anderson Cotton Mills, pfd....	99	—
Aragon Mills .....	300	—
Arcade Cotton Mills .....	175	—
Arcadia Mills .....	350	—
Arkwright Mills .....	390	—
Augusta Factory, Ga. ....	160	200
Avondale Mills, Ala. ....	450	—
Banna Mills .....	158	—
Beaumont Mfg. Co. ....	400	—
Belton Cotton Mills .....	260	—
Brandon Mills .....	250	—
Brogton Mills .....	—	405
Calhoun Mills .....	250	—
Chesnee Mills .....	—	345
Chiquola Mills, com. ....	350	—
Chiquola Mills, pfd. ....	90	—
Clifton Mfg. Co. ....	—	400
Clinton Cotton Mills.....	200	—
Columbus Mfg. Co., Ga. ....	250	—
Cowpens Mills .....	—	150
D. E. Converse Co. ....	—	350
Dallas Mfg. Co., Ala. ....	—	260
Darlington Mfg. Co.....	—	320
Drayton Mills .....	—	220
Duneean Mills, com. ....	230	235
Duneean Mills, pfd. ....	99	—
Eagle & Phenix Mills, Ga. ....	230	—
Easley Cotton Mills .....	275	—
Enterprise Mfg. Co., Ga. ....	175	—
Exposition Cotton Mills, Ga.	500	—
Gaffney Mfg. Co. ....	275	280
Gainesville Cot. M., Ga. com	—	215
Glenwood Mills .....	350	—
Glenn-Lowry Mfg. Co. ....	130	—
Glenn-Lowry Mfg. Co., pfd....	125	—
Gluck Mills .....	—	293
Graniteville Mfg. Co. ....	390	410
Greenwood Cot. Mills .....	370	—
Grendel Mills .....	300	—
Hamrick Mills .....	400	—
Hartsville Cotton Mills .....	385	—
Henrietta Mills, N. C. ....	450	—
Hermitage Mills .....	175	251
Inman Mills .....	400	—
Inman Mills .....	500	—
Internat'l Mills com Par \$50	—	68
(\$50) .....	—	75
Jackson Mills .....	415	425
Judson Mills .....	395	—
Judson Mills, pfd. ....	100	—
King, John P. Mfg. Co. ....	200	—
Lancaster Cotton Mills.....	350	—
Laurens Cotton Mills .....	310	—
Limestone Cot. Mills .....	400	411
Loray Mills, N. C., com. ....	—	—
Loray Mills, N. C., 1st pfd.	—	—
Marion Mfg. Co., N. C. ....	—	401
Marlboro Mills .....	148	—
Massachusetts Mills, Ga. ....	168	—
Mills Mfg. Co. ....	250	—
Molloy Mfg. Co. ....	330	336
Monarch Mills .....	—	375
Newberry Cot. Mills .....	—	435
Ninety-Six Cotton Mills ....	150	—
Norris Cotton Mills .....	300	—
Oconee Mills, com. ....	200	—
Orr Cotton Mills .....	—	412
Pacolet Mfg. Co. ....	—	400
Pacolet Mfg. Co., pfd. ....	100	103
Panola Mills .....	200	—
Pelham Mills .....	150	175
Pelzer Mfg. Co. ....	185	200
Pickens Cotton Mills .....	500	—
Piedmont Mfg. Co. ....	—	580
Poe, F. W. Mfg. Co. ....	355	—
Poinsett Mills .....	—	230
Riverside Mills, com. ....	—	61
(Par \$12.50) .....	—	600
Saxon Mills .....	—	145
Sibley Mfg. Co., Ga. ....	—	400
Spartan Mills .....	63	70
Toxaway Mills, com. Par \$25	260	—
Tucapau Mills .....	—	52
Union-Buffalo M., com. ....	100	103
Union-Buffalo M., 1st pfd....	55	70
Union-Buffalo M., 2nd pfd....	275	278
Victor-Monaghan Co., com	100	106
Victor-Monaghan Co., pfd....	100	—
Ware Shoals Mfg. Co. ....	100	—
Warren Mfg. Co. ....	95	—
Warren Mfg. Co., pfd. ....	120	—
Watts Mills, com. ....	—	103
Watts Mills, 1st pfd. ....	—	130
Watts Mills, 2nd pfd. ....	295	—
Whitney Mfg. Co. ....	375	—
Williamston Mills .....	300	325
Woodruff Cotton Mills .....	—	390
Woodside Cotton Mills, com.	97	—
Woodside Cotton Mills, pfd....	100	—
Woodside Cotton Mills, g'd....	250	—
W. S. Gray Cotton Mills .....	—	—

Heavy Demand for Dress Goods  
Predicted Coming.

A scramble for dress goods in which fine serges will be most sought is predicted in the local market in a few months. Buyers are expected to return in the near future for goods, and it is said will be unable to get them from first hands.

The smaller jobbers who were inclined to have cold feet are holding longer to some of the weaker lines they were formerly eager to sell at a loss in a dull market.

"It is time for confidence," one prominent dress goods man says.

"We are in for a very good season and can expect a run on best serges when manufacturing starts in June and July.

"The faint hearted should consider the words of Elbert Hubbard at a time like this.

"Man has a great many troubles, but most of them never happened. The coming year is going to be the most prosperous you have ever had. It is going to be the most prosperous we have ever had.

"We make these statements in spite of calamity howlers, overall brigades, panic pessimists and election year bogymen.

"To be sure, prices seem high and there is a shortage of production. But nothing will happen. That is, nothing will happen to us individually unless we all get frightened collectively."

## Twisters For Sale.

For Sale—Two practically new Whitin Twisters, 2-in. ring, 3-in. gauge. Address Twister, care Southern Textile Bulletin.

## Winders Wanted.

We want one or two No. 30 Foster Cone Winders, 100 spindles, good condition. Bearskin Cotton Mills, Monroe, N. C.

## Card Grinder Wanted.

Want first class card grinder for 52 Saco-Pettee cards. Must be well recommended with at least 5 years' experience. Pay 60 cents per hour, time and one-half for overtime. Address W. M. C., care Southern Textile Bulletin.

## Machinery For Sale.

For Sale—One number 6 Foster Winder, 100 spindles, suitable for eights or below to 16s yarn.

Two Whitin Twisters, 176 spindles (Whitin gravity), 3-in. gauge, 2-in. ring, for two-ply only.

Twenty-four lattice attachments for Nasmith Comber with conveyors and 10-in. coilers. Most of them never used. Others only very little. The Foster Winder is in good condition, for winding yarn mentioned. The twisters are almost as good as new.

Apply to Kinston Cotton Mills, Kinston, N. C.

POTATO  
CORN  
STARCHTapioca Flour Sago Flour  
Dextrine and Gums  
For SIZING and FINISHING

Oxalic Acid

STEIN, HALL &amp; CO., Inc.

61 Broadway, New York City

Boston  
Philadelphia  
St. LouisProvidence  
Troy  
San FranciscoChicago  
Cleveland  
CincinnatiWhy a Morse  
Silent Chain

The Morse silent chain is used because of its superiority based on the design of the exclusive "rocker-joint" construction, the very highest grade of material and heat treatment, the extreme accuracy in manufacturing and the engineering assistance in the designing of textile drives by engineers trained in this particular line and backed by the long standing reputation of the MORSE CHAIN COMPANY.

DO YOU KNOW about the MORSE Line Shaft Drive,  
The MORSE Spinning Frame Drive?

Write for Booklets

Send for INFORMATION  
Address NEAREST Office  
FACTS will Surprise You

Morse Chain Co.

Ithaca, N. Y.

ASSISTANCE FREE

CHARLOTTE, N. C., 404 Commercial Bank Building

Cleveland  
Chicago  
Baltimore  
Boston  
New YorkDetroit  
Philadelphia  
Pittsburgh  
San FranciscoAtlanta  
Montreal  
Minneapolis  
St. Louis

"MORSE" is the guarantee always behind our  
Efficiency, Durability and Service

**Remarks on Modern Knitting Mill Design.**

(Continued from Page 7.)

this way operatives receive the best light, and furthermore, in this method it is possible to have the main trucking alley at the center of the room, which is the space farthest from the windows, and which naturally is the space which best serves the total floor area from a trucking standpoint.

**Special Dye House Requirements.**

There are a few fundamental requirements for a dye house which are of the utmost importance. These can be briefly stated as good daylight, proper ventilation, good drainage and convenience of location to other departments.

Mills which have dye houses meeting all of these requirements are few and far between. Practically all old mills have dye houses located on the ground floor or in the basement. Naturally most of these do not have good daylight, many of them have no ventilation; the drainage is usually inadequate and in practically all cases these dye house locations involve a great amount of elevator service to get goods to and from other departments.

The location of a dye house in its proper place in sequence of operations, whether this be on the top floor or on next to the top floor, as the conditions may require, will eliminate much unnecessary handling of the product and will in practically all cases not only pay a large return on any investment required to get this location, but will also give many other advantages.

The question of proper daylight in the dye house for washing and bleaching departments is easily solved by the construction of modern concrete buildings, and in the case of the top floor location overhead light becomes easily available, so that this is very easy to take care of.

There are many possibilities in the way of locating these fans with their supply and exhaust ducts. Naturally, the more rapidly the air change is made, the more completely are the steam and vapor removed from the building. In summer, due to the use of large quantities of hot water and steam, the dye house becomes a very warm place in which to work and at such periods of the year very adequate exhaust systems are desirable in order that maximum cooling effect may be obtained. The question of prevention of condensation on walls and ceilings goes hand in hand with the question of ventilation and will often require special treatment, especially in climates where long cold winters are the rule.

Under the heading of drainage, the requirements in this case are quick and positive drainage of floors, which is of the greatest importance. Water and waste liquors must not be allowed to stand around in pools on the floor. The discharge from vats and tubes should be piped directly to the sewer and not be allowed to discharge openly on the floor or into gutters, because of the large amount of additional steam and heat which are produced by this method.

In a concrete building it is necessary that the floors be covered with a special waterproof coating, as concrete alone is not sufficient guarantee of a tight floor. This presents no special difficulties. A desirable method of handling this construction is to have a working floor located a short distance above the concrete floor. This working floor is constructed of plank with open joints. This gives operatives a dry floor on which to work and also obviates the necessary for setting machines in pits.

The modern dye house has, of course, a drug storage room and a dyer's office and laboratory in connection therewith. These should be arranged opening directly into the dye house, and it goes almost without saying that the dye house of a modern knitting mill should be located as closely as possible to the point where the goods which are to be dyed or washed are to be produced, and when the goods leave the dye house, they should go directly by the shortest route to the dry room, which should be located close to or adjoining the dye house.

**Power Transmission and Electric Drive.**

The use of long lines of shafting is now practically obsolete for knitting mills, and in most modern hosiery and underwear mills machines are driven in small groups by motors located on either floor or ceiling. In the case of machines with floor shafts the best practice is to drive each line of shaft with a single motor with chain drive, so that motors may set directly under the tables, out of the way. Individual motor drives are being supplied to the larger machines, and in many cases to individual dyeing machines, all apparently with entirely satisfactory results, with the possible exception of underwear knitting machinery of certain types, while we understand that better results have been found by driving in relatively small groups.

**Lighting the Mill.**

The past few years have shown great strides by the manufacturers of lighting equipment, such as shades, lamps and reflectors, and the average knitting mill, if it has not a modern lighting system, could well afford to consider entirely going over and modernizing the lighting layouts and equipment. Indirect lighting has been used to a great extent lately in hosiery mills, and a soft uniform light obtained by this method has proven very satisfactory. There remain, however, some departments where the application of this does not seem to give the most satisfactory results, such as in boarding rooms and some special departments.

**Heating and Ventilating.**

In modern knitting mills the subject of proper heating and ventilating is receiving much more consideration than formerly and the best method is the use of a combined system of heating and ventilating with a central station where all air is properly conditioned before being blown into the room. It is desirable to have this supplemented in the form of modern cast iron wall radiators for the windows, and, by all means, a system of automatic tem-

perature control, with thermostats located in every room. It is hopeless to expect that uniform temperatures may be obtained in work rooms by having a man go around and open and shut valves by hand.

**Service Equipment.**

It is hardly necessary to speak here of the very great improvements which have been made in all manufacturing plants in the way of provisions for the comfort and welfare of the employees. These take the form of lunch rooms, rest rooms, hospitals, the best toilet and wash room facilities, schools for the training of employees, etc., and while these offer no particularly difficult or technical problems for the designers of modern mills, they are features which must be kept in mind in order that proper space may be provided for them at the location where needed and where they will be conveniently located for use of the employees.

**Power Plants.**

The power plant problem at the average knitting mill is not one as a rule requiring the generation of large quantities of power and many manufacturers may think they can well afford to purchase the small amount needed. However, the small plants almost invariably require the use of a considerable amount of steam, not only for the heating of buildings in winter, but also for the operation during all seasons of the year of the dye house, requiring large quantities of hot water and also the operation of dryers, which at all times take a large quantity of steam. Having these requirements in mind, it will be seen that the average knitting mill should generally arrange to generate its own power; so that exhaust steam from engines may be fully utilized in the heating of water and in the operation of dryers. Under these conditions the average knitting mill can usually make power at a cost well below the cost at which any central station could afford to sell the same amount of power.

**Water Storage For Dye Houses.**

The question is usually raised as to whether the location of dye houses in the upper story of the plant will not greatly block the provision of a suitable supply of water for this department. This may be answered by saying that if this is the case, it is necessary to provide an enclosed tank located on the roof of such a building, containing as a rule, two storage tanks, one for hot water and one for cold.

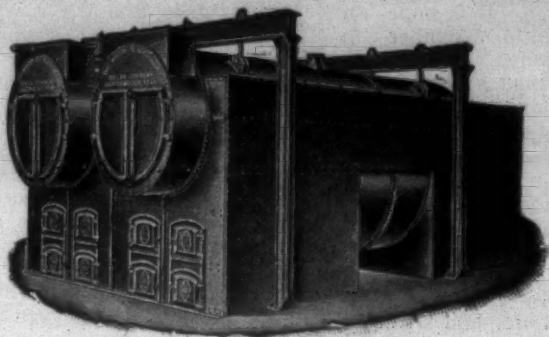
Concrete construction makes it comparatively simple to carry these heavy loads at the roof level. The use of ample storage tanks at this point makes it possible to use very small pumps for keeping the water supplied to them; in many cases the city or plant pressure will keep these tanks filled through a relatively small line. Also in such cases a water heater located at a lower level in or near the power house may be utilized for providing a circulating system whereby the hot water in the storage tank is being continually recirculated through this heater, into which all exhaust steam from the engines may be exhausted.

The problems met with in the de-

sign of modern knitting mills do not differ greatly from those met with in other industries, and require, generally speaking, a knowledge of the work to be done in such plants, a familiarity with the best plants of the country, and what they are doing, and the application of sound engineering principles and good judgment, combined, in the case of old plant extension, with some ingenuity in devising rearrangements; and finally there is required the ability to see the problem as a whole clearly and to adapt the proper relative value to the importance of each department, so that the whole enterprise when completed may be well balanced and meet the requirements of the manufacturer in the best way possible in view of special conditions to be met.

The foregoing discussion briefly summarizes the more important considerations that are taken into account by modern progressive industrial engineers in designing new mills. There is a large field of opportunity for improving older mills, in which a few, or sometimes almost all of these desirable features are lacking. In the growth of any plant, as it takes place from year to year, the natural tendency is to take each step towards increasing production by the easiest and least expensive method. No one of these steps may depart very far from the proper path. But a start once having been made in the wrong direction, even if the deviation is but slight, is very apt to produce a cumulative effect, that after some years of growth results in a badly arranged, poorly lighted, unsanitary, and ugly mill, and one in which the cost of production is surprisingly larger than it should be. It is safe to say that in the majority of mills over a dozen years old, a careful study of the conditions by competent industrial engineers will disclose possibilities of increasing production, decreasing operating costs, and improving lighting and sanitary conditions, at comparatively small expense, and with little or no additional building operations. A study of the heating and power plant conditions in old mills, including the utilization of exhaust steam and condensate and hot circulating water from condensers, as well as operating methods, almost invariably discloses that large economies may be effected with comparatively small expenditures. Many mills that today are finding it difficult to meet the demands for production, and whose owners hesitate at the large outlay required for new buildings with the existing high costs of building operations, are neglecting opportunities to vastly improve their situation by a very modest outlay.

It has been a great pleasure for me to address a representative assemblage from so great an industry. Much of what has been said will sound trite to you; but the most obvious things are the most often overlooked, and it is well for all of us to sometimes check up the things we know best in order to see that we are not unconsciously neglecting a principle that is so old and so well recognized that we have stopped thinking about it.



**When  
You  
need  
Boilers  
or  
Tanks  
Write Us**

**The Walsh & Weidner Boiler Company**  
Chattanooga, Tenn.

Write us for Prices—Send For our Catalogues.

IMMEDIATE SHIPMENT

**HYDROSULPHITE CONC  
POWDER**

FOR

**Vat Colors and Indigo**

**H. A. METZ & COMPANY, Inc.**  
NEW YORK

SOUTHERN OFFICE

210 South Tryon Street, CHARLOTTE, N. C.



**The Automatic Blower  
and Sweeper**

For

**Textile Mills**

Manufactured  
By

**H. E. Clark  
Mfg. &  
Foundry  
Co.**

BOX 372

Atlanta, Georgia

Foundry and Machinists  
High Grade Castings a Specialty

for the Sweeping  
of the alleys and  
under the frames  
in the Spinning,  
Spool and Twister  
Rooms. It soon  
pays for itself in the  
saving of labor and  
brooms.

**"Our Merchant Marine and Its Possibilities."**

(Continued from Page 14.)

cial treatment and which is more effective than any statute could be. They deal with their own people, because they realize that the nation as a whole is vitally interested. The average American had as soon go in a German or a French ship as an American ship. You watch the Englishman. They know which side their bread is buttered on. They play the game square, it is true. But so far as the sea being perfectly free is concerned, a great many gentlemen who have gone on it have found our differently. You are perfectly free to parallel the R. F. & P. from here to Washington; but I don't notice anyone doing it. The Englishman is ahead of everyone else about 100 years in the salt water business, and their merchants who trade all over the world are entitled to the respect of everybody. Their name is a synonym for upright honorable methods. They gave aid when aid was necessary.

Now you say if we give preferential treatment they will retaliate. We want them to. In the carriage of commerce between us and Great Britain we would accord to them the same treatment as they would give to us in that trade. But we would not accord to the Norwegian the same treatment when he attempted to compete with us in the trade with England in the handling of our goods, our commerce, with England. It is quite simple. You have an automobile and I have one. We both pay a state license and we have equal privileges. But when a "jitney" comes along and wants to operate under that same license, he is told you will have to pay another license, on account of your business we will tax you extra. That is all it amounts to.

You say it will create hard feelings. I daresay there will be some hard feelings created, that some hard feelings exist today. And there will be a lot more hard feelings if we do not have our marine.

We have built up our navy. We have built up our shipping. Is that fleet to be sacrificed now? Is that fleet to be turned loose now practically naked at the present time?

Some new operators say they can operate them. Anybody could make money with them now—except the Emergency Fleet Corporation. I think they made \$160,000,000 and it will just about take care of their depreciation account for the time they have been operating.

I do not predict any disaster at all. But that there is a strong competitive time coming, every man knows that is in the manufacturing business, and every man knows he must sell goods abroad under just as favorable conditions as his foreign competitor sells them under. And the only way he can do it is to have his own nationals represented

in the carriage and sale of those goods, and that means your own means of transportation.

Before the war many great corporations of this country bought their ships abroad. That was good business. They bought them cheaper than we could build them. That was good business—at least it looked like good business then. The war came on. They had orders for large numbers of ships abroad. They couldn't get them. They came to us shipbuilders who were still operating and said "We want ships." One of them came to us and wanted us to build 48 ships for them. We said we will build 8 for you. They asked why we could not build them 48 ships. We said the principal reason is that you have been buying your ships abroad for the past 20 years and you cannot buy them in the foreign shipyards now or you would still be buying them abroad, and you get 8 instead of 48 from us. And they lost more money through their inability to buy the ships they wanted, ten times the difference in cost which they had saved by buying abroad.

There are many questions that come into this question of a marine more important than the ship question. The greatest of all free traders and one of the greatest men of this country, Thomas Jefferson, said, "If there is anything any country is bound to protect it is ship building and owning, because only in that way can you protect yourselves in commerce against the world." Yet it is up to some of us to keep on reminding men that they lost during the war some millions because of the lack of a marine. A marine is necessary to a country that lives upon the ocean and expects to do business upon the ocean.

Now this commercial treaty business is the principal reason given why we could not have preferential treatment for our own vessels. For the last year or so we have heard much about commercial treaties. What is a commercial treaty? It is a commercial convention. It may be abrogated at the pleasure of either signatory on six months' notice. We have them with practically all countries. Most of them have been abrogated, most of them abrogated in part, from time to time, some of them in whole. Countries have modified this agreement just like you and I might modify any agreement we might have for the sale of goods. It is not any serious thing. We have not abrogated them because we were afraid of hurting someone's feelings. There has been strong objection abroad to it. When we passed the Panama Canal act in which we gave a preference to our own vessels in our coastwise trade, we abrogated that because foreign countries took exception to it; took exception to our doing something for our own commerce. The President favored it and Congress passed it. And in the meantime the people in-

**Spartan Sizing Compound Co. Compounds, Tallows**

MORELAND and WITHERSPOON, SPARTANBURG, S. C.

Manufacturers of  
**O. K. Products**

interested in our own shipping could not get anything from Congress. We can abrogate this treaty. Our treaty with Great Britain permits us now in our own direct trade to discriminate in favor of our own vessels. The form that discrimination will take is a matter for Congress to determine, or for the Shipping Board. But unless there is a preferential treatment of some kind for American ships to enable the business to become established on the waters, the vast fleet that has been built up in this country will inevitably, as have other fleets, pass into foreign hands. It cannot be done. And the proof of this is that it was not done for a period of 75 years. We gradually got eased out of this entire situation, until when the war came upon us we hadn't enough shipbuilders left to build ships to carry our own soldiers. We had given it up. They said, You are a monopoly in restraint of trade; you people have fattened on the public treasury. You will understand what kind of a monopoly we were when I tell you that before the war there were two ship yards in this country that had not gone through the Valley of the Shadow of Death from one to five times, and been reorganized. It takes a shipyard about three breaks to go broke. We have felt, as far as our national operation was concerned, that the views of foreign ship owners have been very much more potent than those of our own people, and out in the Middle West where the trans-Atlantic ship owners have advertised in all newspapers, spent millions a year, that perhaps that had something to do with it. The fear of political people to do anything that would put on its feet a national business necessary to the nation cost us three or four billions during the war, and it will cost us as much more if we have another war, unless, as some people think, we will never have another war. They have not demonstrated that entirely, because the world hardly seems to be through with fighting yet. The policy of listening to those to whose interest it is to have the cheapest freight and also to whose interest it is to carry the passengers and carry the freight has followed too long. The passenger carrying business across the Atlantic is one of the most valuable of businesses. The most of the ships we built during the war were for carrying freight.

One reason why you came to this city, is not only that because of its hospitality and because of the historic interest of Richmond, but you could come comfortably in Pullman cars and live comfortably at hotels, so that in the Atlantic passenger carrying business the big ships that carry passengers, that have suitable accommodations, and that carry freight, too, are a prime necessity, or even more of a necessity than the ordinary tramp carrier. And the ships that run from Europe to South America today are the best equipped and the most luxurious ships that travel upon the ocean today. And if a man is going from New York to Argentina or to Brazil he can travel best to Southampton and thence to South America in a British ship. And if coming from South America to New York, he can make

better time and travel in more comfort by going to Southampton and thence to New York. And your South American customer who gets off at Southampton can buy as cheap there. He may never reach New York. They do not pass them through without making every effort to stop them. These ships are a necessity in order to keep in touch with our own customers in a foreign country.

Now with South America, one of our best customers, do you know that within six years we have bought twice as much as we have sold her, and that she buys her manufactured goods mostly from Europe, and is there any reason why, with all the coffee and hats and rubber, why there should not be exchanged for these products the cotton goods manufactured in this country? Is there any prime reason why, instead of shipping abroad this cotton you gentlemen should not make it up at home and ship to our customers in the finished product?

It took us a long time in the South to find out that it did not pay very well merely to produce the raw material; that there was move to be made in manufacturing the cotton; that the man that makes something, the man who takes the raw material and turns it into something useful and sells it, is the useful man and his reward is proportionately greater. And that is what we will do nationally one of these days. I do not see any particular reason why we should ship cotton all over the world when we can manufacture it here just as well.

Transportation — which means ships, insurance, banking connections, selling arrangements—that takes years to build. No matter what happens to our merchant marine, you gentlemen want to remember that it is not possible to build it up into a great thing for a good many years. It takes time to build an organization. The fixing of our policy now will be but the start. The conditions under which we ship our goods must be settled. Some preferential may be adopted through the railroads; but something must be done on the sea itself. We have spent millions and hundreds of millions in the improvements of our coasts and terminals. Are we building up the United States for the purpose of furnishing carriage to the ships of other nations exclusively? Didn't the war show us that a merchant ship is no longer a merchant ship in time of war but a warship as well, manned and gunned as every other warship? And didn't it show us that shipbuilding suddenly became the first business of the United States from being the twenty-third business? And you and I wondered whether we could build them fast enough to replace those destroyed by the submarines of Germany.

We may depend upon others to execute our will abroad, but there are a whole lot of us Americans left who think that the United States is after all, through its example as a government and through the example of its business men and its men of commerce, one of the greatest civilizing and humanizing influences in the world; and we believe that the only way in which our com-



## AMERICAN HIGH SPEED CHAIN

Fifteen years the business of American High Speed Chain has been given to proving and improving steel chain belting for transmitting power. They are pioneers in the design and manufacture of this chain.

This long experience has established one important truth—That the mechanical simplicity of construction which distinguishes American High Speed Chain most fully meets the requirements of all conditions of service.

We have also learned that neither belts nor gears should be used where it is possible to use chain drive. Are you ready to believe that it is worth anything to know it if it should happen to be true?

### ABELL HOWE COMPANY

Chicago, Ill.  
Branch Offices in Philadelphia, Pa., and Greenville, S. C.  
E. S. PLAYER, Southern Rep., Greenville, S. C.

## GREENVILLE TEXTILE SUPPLY CO.

Greenville, S. C.

Textile and Electrical Distributors

Chapman Ball Bearings

## DIXON LUBRICATING SADDLE CO.

BRISTOL, RHODE ISLAND



Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles, Stirrups and Levers.

WRITE FOR SAMPLE

## OUR SPINNING RINGS—SINGLE OR DOUBLE FLANGE

Start Easiest, Run Smoothest, Wear Longest!

## PAWTUCKET SPINNING RING CO.

CENTRAL FALLS, R. I.

## STRUCTURAL and Bar Steel, Ornamental Iron, Fenestra Steel Windows, Chicago Tanks and Towers.

REINFORCING BARS AND FENESTRA STEEL WINDOWS in stock in our Charlotte warehouse. Immediate shipment. We are prepared to cut and fabricate reinforcing bars. Send plans or list of material for prices. Our Engineering Force is at Your Service.

### SOUTHERN ENGINEERING COMPANY

504 Realty Building

CHARLOTTE, N. C.

## TAPE DRIVES

OUR TAPES ARE ENDORSED BY MACHINERY EXPERTS. They know their quality and they know their scientific structure. Exhaustive trials by practically all machinery makers have demonstrated that they have no superior.

Write us.

Barber Manufacturing Co., Lowell, Mass.  
SPINNING TAPE SPECIALISTS

# MONOPOLE OIL

REGISTERED TRADE MARK NO. 70991

**Special Sizing and Finishing Products  
for Cotton, Wool and Silk**

Cream Softener

Soluble Oils

Bleaching Oil

Steam Black

Levuline

Glasgow Sizing

**HYDROSULPHITES**

(For all Purposes)

**Jacques Wolf & Company**

MANUFACTURING CHEMISTS AND IMPORTERS  
PASSAIC, N. J.

**UNIVERSAL WINDING COMPANY — BOSTON**



Winding machines for single and ply yarns, cotton, woolen, worsted and silk. Write for circular describing the NEW WIND DOUBLER, also the No. 80 for winding SUPERCONES.

Southern Office Charlotte, N. C.  
1216 REALTY BUILDING, P. O. Box 523  
FREDERICK JACKSON, Southern Agent

## Bleachers Blue, That Correct Tone

which appeals to the experienced eye of the buyer of white goods is produced by using Marston's Bleachers Blue. Costs no more than the "just as good" and will give the results desired

*Fast and Uniform*

**John P. Marston Company**

247 Atlantic Avenue, Boston

"The heresy of today is the orthodoxy of tomorrow."

**DYE YOUR YARNS IN THE WOUND FORM**

on machines that pay for themselves in no time. Send us your job dyeing. Our prices are low, deliveries are prompt, and service the best. Franklin machines are used all over the world.

As job dyers we color over a million pounds of cotton and of worsted a year. Let us serve you. Our representative will be glad of an opportunity to see you and fully explain all details.

**FRANKLIN PROCESS CO., PROVIDENCE, R. I.**

SOUTHERN AGENTS KEYSTONE FIBRE CO., YORKLYN, DEL.

**THE WILSON COMPANY**

GREENVILLE, S. C.

**TEXTILE MACHINERY and SUPPLIES**

STRUCTURAL STEEL

ROVING CANS, CARS, BELTING, WOODEN LOOM PARTS,

MILL BROOMS, PACKINGS OF ALL KINDS, SLASHER

CLOTHS AND SHEEP SKINS.

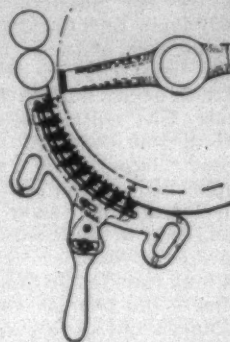
merce can be carried to the far corners of the earth is by our own people, in our own way, doing business in our own way, carrying our commerce in our own vehicles, and exercising our right as free Americans to do business in the proper way in any man's country without asking anybody's permission.

**New System for Heating Mill Buildings.**

(Continued from Page 10.)  
this is the best place to feed water

into boilers, especially with the Farnsworth Closed Loop Boiler Feeding System which feeds water into the boiler very slowly and easily.

If there is any further information that might be desired regarding piping up the system as shown herewith, the inventor will be very pleased to answer any questions relative to the size of risers and steam mains required to handle this kind of a job.



## Less Waste — Cleaner Yarns

**Atherton Adjustable Pin Grids**

most manufacturers are adopting, knowing that they will pay for themselves in a short time in the saving of good stock, at high price of COTTON today.

**Atherton Pin Grid Bar Company**

L. D. ARMSTRONG, President  
GREENVILLE, S. C. PROVIDENCE, R. I.

**Poor Tempering Does It** { Makes broken travelers and cut threads.

**U.S. RING TRAVELERS ARE** Amos M. Bowen  
**UNIFORMLY TEMPERED** Treasurer  
Providence, R. I.

WILLIAM P. VAUGHAN, Southern Representative, P. O. Box 792 Greenville, S. C.

**B Y C**

TRADE MARK

**BARBER - COLMAN COMPANY**

BOSTON, MASS.

MAIN OFFICE AND FACTORY

ROCKFORD, ILL.

GREENVILLE, S. C.

**HAND KNOTTERS AND WARP TYING MACHINES**

**CAROLINA SIZING & CHEMICAL COMPANY**

CHARLOTTE, N. C.

**Manufacturers of O. K. PRODUCTS**

O. K. TALLOW  
SOLUBLE OILS

O. K. SIZING  
TALC

## Chemicals and Oils

**For Sizing, Finishing and Dyeing**

**The New Brunswick Chemical Co.**

326 Broadway, NEW YORK

Works at New Brunswick, N. J.

Southern Representative, MAX EINSTEIN, P. O. Box 211, Charlotte, N. C.

*Guaranteed Quality—Demonstrations Made*

## Knit Goods

Philadelphia.—The reports which have been circulated that some knitting mills were going to shut down have not affected the market.

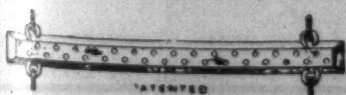
As yet there has been no intimation of a softening in prices on hosiery, and the rather general opinion of knitters and selling agents is that present levels will rule firmly for the next several months if not for the balance of the year. It is pointed out that many of the mills still have uncompleted orders on hand that will assure operations until about the close of the summer and that they would continue operations until that time without booking additional business. Others less fortunately situated from the standpoint of business in hand have either got to press for new orders or curtail production, and as previously mentioned, the latter is the most likely course of a majority of these knitters. Thus far production costs have not eased off the least bit and many knitters have about given up hope of being able to produce hosiery for less than present costs during the next several months. Both raw materials and yarns are remaining firm at high prices and operatives are exacting high wages. These, of course, are the principal factors influencing high production costs and until they soften there is little hope of reducing selling levels.

### Southern Knitting Mills Not Planning to Shut Down.

Spartanburg, S. C.—The managers of the knitting mills of Spartanburg county were questioned concerning a press dispatch out of Chattanooga which stated that because of labor conditions, talk of price cutting and the impracticability of producing goods for less, knitting mills of the Southern division of the National Association would have to close down when orders on hand were filled.

The managers of each of these mills stated that their plants did not contemplate closing down. They said the labor conditions were about 75 per cent of normal, that they had enough orders on hand to run several weeks, but that they had no idea of closing down. The mills are: the Crescent, the Star, the Calton and the Blue Ridge Hosiery Mill.

### Improved Rice Dobby Chain

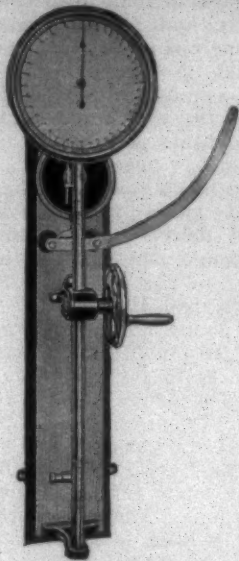


reduces broken bars to a minimum because the wire eyes do not break into the side walls of the peg holes. The eyelets are fastened so securely that they cannot work loose.

Rice Dobby Chain Co.  
Millbury, Mass.

Send Us Your Order To-day

## SCOTT TESTERS



CATALOG—  
HENRY L. SCOTT & CO.  
PROVIDENCE, R. I.

## WE SPECIALIZE

In Rewinding A. C. and D. C. Apparatus  
WINGFIELD & HUNDLEY  
Box 844 Richmond, Va.

## Textile Mill Floors Scrubbing Powder



The merits of MI CLEANER is no longer a QUESTION, but ABSOLUTELY the achievement of all that is great and good to perfect a genuine SCRUBBING and SCOURING POWDER. Our CUSTOMER'S tell the tale.

We Guarantee Absolute Satisfaction or No Charge

Champion Chemical Co.  
Charlie Nichols, General Manager  
Asheville, N. C.

## MERROWING

Established 1838

FOR—

Stocking Welting  
Toe Closing  
Mock Seaming

Maximum Production  
Minimum Cost of Upkeep  
Unexcelled Quality of Work

## THE MERROW MACHINE COMPANY

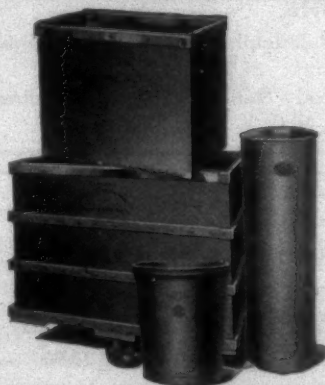
20 Laurel Street, Hartford, Conn.

## Anti-Ballooning and Furtardo Thread Guides

These thread guides prevent excessive ballooning and decrease breakage of ends on spinning frame. They decrease the work of spinners and enable each spinner to run more sides.

J. P. O'CONNELL

Crompton, . . . . . Rhode Island



Lighter—Tougher—Stronger and More Durable

Laminar Roving Cans and mill receptacles are made of VUL-COT Fibre. That is really the whole secret of the phenomenal reputation that has supported Laminar products for over thirty years—

For VUL-COT Fibre is a super development of vulcanized cotton fibre. The processes by which it is made represent a lifetime of development that has given it extra wear resisting qualities.

The reason is that VUL-COT Fibre cannot dent, crack, rust or splinter and all Laminar containers are as smooth and clean as a whistle.

Full particulars, descriptions and illustrations with sample of VUL-COT Fibre will be sent in answer to your request.

AMERICAN VULCANIZED FIBRE CO.

Sole proprietors and manufacturers  
New England Dept. 12 Pearl Street,  
Boston, Mass.

C. C. Bell, Vice-President  
Resident Manager  
Head Office and Factories:  
Wilmington, Del.

## THE GREATEST IMPROVEMENT MADE IN COTTON SPINNING IN QUARTER OF A CENTURY

## The Richards-Hinds Light Running Rolls

Over 850,000 Spindles Equipped to Date

### Guaranteed Claims

Cockley Yarn Preventor  
Extra Strength of Yarn  
Less Waste  
Greater Production

Less Change of Roll Settings  
Reduced Cost of Spinning  
One-third Saved on Leather Covered Rolls  
Better Spinning with Improved Product

All machine builders are agents and will quote prices for new work.  
Also for prices and particulars write to

The Metallic Drawing Roll Company  
Indian Orchard, Mass.

D. H. Mauney, Pres. Phil S. Steel, Vice-Pres. Jno. J. George, 2nd V.-Pres.  
J. S. P. Carpenter, Treasurer D. A. Rudisill, Secretary

## Mauney-Steel Company

### COTTON YARNS

DIRECT FROM SPINNERS TO CONSUMER  
237 Chestnut Street Philadelphia, Pa.  
Eastern Office, 336 Grosvenor Bldg., Providence, R. I.  
Southern Office: Cherryville, N. C.

MILLS DESIRING DIRECT REPRESENTATION AND HAVE THEIR  
PRODUCT SOLD UNDER THEIR OWN MILL NAME WILL  
PLEASE COMMUNICATE.

## CATLIN & COMPANY

NEW YORK BOSTON PHILADELPHIA CHICAGO

### Commission Merchants

Cotton Piece Goods and Cotton Yarns

Southern Office, 6 E. Fourth St., CHARLOTTE, N. C.

## J. SPENCER TURNER COMPANY

### COTTON CLOTHS AND YARNS

56 Worth Street  
NEW YORK

Boston Chicago Philadelphia Reading  
Amsterdam Hamilton, Can. Manchester, Eng.

SOUTHERN OFFICE, 614 Commercial National Bank Building  
CHARLOTTE, N. C.

## Emmons Loom Harness Company

The Largest Manufacturers of Loom Harness and Reeds in America

### Loom Harness and Reeds

Slasher and Striking Combs Warps and Leice Reeds,  
Beamer and Dresser Hecks, Mending Eyes, Jacquard  
Heddles

LAWRENCE, MASS.

## STOCKS

## Hill, Cark & Company

### COTTON MILL STOCKS A SPECIALTY

41 S Church St., Charlotte, N. C.

## BONDS

## MONTGOMERY & CRAWFORD

SPARTANBURG, S. C.

Textile SUPPLIES Electrical

HARDWARE

MACHINERY

### Linker Troubles,

Electrical Stop Motion Troubles

All Kinds of Warper Troubles

Taken care of by Experts

Cocker Machine and Foundry Company

Gastonia, N. C.

Builders of Warpers, Linkers, Ballers, Reels, Etc.

# The Yarn Market

Philadelphia.—Cotton yarn quotations are quite irregular, due to the willingness of some mills to consider business, and to the readiness of some merchants to turn their yarn into cash. No sizable business is reported, as most of the trading is confined to the wire trades at the moment and they are unable to pick up many spot or nearby lots.

An instance was cited where 2-50s combed yarns were quoted for prompt delivery below any price mills would consider for the same number in carded stock. Sales of 2-60s combed are reported here at \$2.50 a pound; and this is lower than some 2-50s bought on the same day.

From 8s to 16s, inclusive, carded ply skeins, prices are off a cent a pound. Twenties, two-ply, can be had at 93 cents and 24s at \$1 a pound, while 26s-2 are selling on the same basis as single carded skeins of the same count. There appears to be nobody willing to give more than \$1.25 for 30s-2 carded skeins. These counts in carded ply warps and tubes have undergone similar recessions.

SOUTHERN 2-PLY CHAIN WARPS, Etc.  
6s to 10s 75 a 78 2-ply 26s 1 06a 1 08  
12s to 14s 80 a 2-ply 30s 1 25a  
2-ply 16s 91 a 2-ply 40s 2 15a  
2-ply 20s 95 a 2-ply 50s 2 60a  
2-ply 24s 105a

SOUTHERN TWO-PLY SKEINS.  
6s to 10s 73 a 75 30s 1 20a 1 25  
10s to 12s 74 a 75 40s 1 90a 2 00  
14s 85 a 50s 2 50a  
16s 88 a 60s 2 70a  
20s 93 a 95 Upholstery  
24s 105a Yarns  
26s 110a 8s, 3 & 4-ply 60 a 61

DUCK YARN.  
3, 4, & 5-ply skeins—3, 4 & 5-ply skeins—  
8s 74 a 16s 90 a  
10s 75 a 20s 98 a  
12s 76 a

SOUTHERN SINGLE CHAIN WARPS.  
6s to 12s 76 a 78 24s 1 08a 1 10  
14s 82 a 26s 1 10a  
16s 85 a 30s 1 15a  
30s 93 a 95 40s 2 00a 2 15  
22s 96 a

SOUTHERN SINGLE SKEINS.  
6s to 8s 75 a 20s 90 a  
10s 77 a 22s 93 a  
12s 78 a 24s 1 02a  
14s 80 a 26s 1 05a  
16s 83 a 30s 1 20a

SOUTHERN FRAME CONES.  
8s 73 a 20s 84 a  
10s 74 a 22s 85 a  
12s 75 a 24s 92 a  
14s 77 a 26s 98 a  
16s 80 a 30s 1 00a  
18s 81 a 30s extra 1 08a 1 10

COMBED PRELEN CONES.  
10s 1 16a 28s 1 45a  
12s 1 18a 30s 1 49a  
14s 1 20a 32s 1 53a  
16s 1 22a 34s 1 54a  
18s 1 24a 36s 1 58a  
20s 1 27a 40s 2 10a  
22s 1 29a 50s 3 15a  
24s 1 34a 60s 3 35a 3 40  
26s 1 38a

Columbus Mfg. Co.

Columbus, Ga.

J. H. Hines.....Superintendent  
D. F. Clark.....Carder  
J. L. Riddle.....Spinner  
Cliff Baines.....Weaver  
J. P. Rivais.....Cloth Room  
W. W. Polk.....Master Mechanic

## SYDNOR PUMP & WELL CO.

Richmond, Va.

Supplying Cotton Mills with  
Water for 30 Years

### Weaver.

Wanted, a good man to take charge of weave room with 300 looms all on plain white work; the mill is being increased at present and will in a short time have 400 Draper looms. If you are not a weaver and a manager of help, don't answer this ad. Address S. M. T., care Southern Textile Bulletin.

## ENGINEERS PLANNING POWER TRANSMISSIONS

Secure Data and Estimates of  
"MORSE" DRIVES  
SAVE Construction, Space, Light,  
Fuel, Producing More with Less.  
MORSE CHAIN CO., ITHACA, N. Y.  
Engineering Services, Assistance,  
Atlanta Charlotte Baltimore  
Philadelphia

# FILTERS

Careful and dependable engineering, manufacture and erection.

Norwood Engineering  
Company

Florence, Mass.

CHARLES M. SETZER

Southern Representative

Charlotte, N. C.

## BRICK

BUILD NOW, The Price Cannot Be Cheaper

We have the most efficient brick plant in the South, with every fuel and labor saving device known to modern brick making. Get the advantage of this efficiency in quality and price by buying from us.

Prompt shipment common building brick, any quantity, all hard, beautiful red.

YADKIN BRICK YARDS

New London, N. C.

## Cotton Goods

New York.—A little steadier tone in the print cloth markets and very prompt orders laid down for dress gingham for the spring season of 1921 were the chief merchandising features of the cotton goods market last week. Finishers of cotton goods have been advancing prices to take care of added labor costs while most of the cotton mills have made no effort to pass along the added costs that has resulted from a wage advance of 15 per cent that became effective in New England mills June 1.

In the cotton goods trade there is a steadiness not seen in the other divisions. Converters are securing very little new business on finished goods and are not placing much business with finishing plants. The larger concerns that have been in the business for many years are known to hold light stocks, and some of them are waiting to hear from mills that lower prices will be considered for late deliveries, especially on fine and fancy goods.

Jobbers are manifesting little inclination to buy staple goods and they declare they are not going to make further blind commitments until they know more of the location of goods long due them. There is a great deal more talk about cancellations than there is actual repudiation of contracts. An effort made this week to ascertain the exact proportion of vitiation of cotton goods orders in a large house in the past thirty days disclosed that it amounted to between 5 and 5½ per cent, and fully three-fourths of it was really justified. A few cases of deliberate intent to crawl away from business obligations is readily magnified into something of great moment, especially when agents for wool mills and silk mills are ready to say that they have not lost 50 per cent of their advance business through cancellations. The cases are not parallel, many silk and wool goods people regarding advance business as a hazard rather than a binding agreement, even in normal times.

It is not denied that the attitude of the buyer in general has changed

greatly toward the market in the past month. Instead of being a supplicant for merchandise of all kinds he has become a critic of values. He tries to hide the fact known to sellers that heads of houses do not want commitments made at this time that can be avoided. It is not a question of values with them but a matter of deciding what extent the general financial restrictions are going to affect legitimate merchandising.

Trade as a whole continues very quiet. The government reports on cotton indicates a sixth successive short crop at a time when manufacturers were hoping for abundance. Jobbers are not operating, most of them being anxious to receive the many goods that are long delayed in shipment because of transportation difficulties. Until these goods come to hand and it is known how their stocks will stand, they are advising their retail customers to supply immediate needs. Converters and cutters of cotton goods are buying only to meet immediate needs as they are apprehensive of the final effect of the slump in the silk industry, the hesitation in wool goods, and the low prices current on burlaps. The lack of full production in mill centers during the summer is a factor of uncertainty to be counted on in any future estimate of the course of cotton goods prices.

Quotations follow: Print cloths, 28 inch, 64x64s, 16½c; 64x60s, 15½c; 38½ inch 64x64s, 24c; brown sheetings, Southern standards, 28c; denims, 2.20's indigo, 47½c; tickings, 8 ounce, 55c; staple gingham, 27½c; dress gingham, 35c to 37½c; prints, 23c.

Eva Jane Mills.

Sylacauga, Ala.

G. F. Roberts.....General Supt.  
E. S. Dunn.....Asst. Supt.  
B. B. Scott.....Carder  
O. D. Dunn.....Spinner  
F. G. Tapley.....Slasher  
R. L. Burris.....Weaver  
M. J. Bates.....Cloth Room  
Robt. Hamilton....Master Mechanic

Sole Selling Agents

CLARENCE WHITMAN & SON, INC.

MERCHANDISING

FOR TEXTILE MILLS

354 Fourth Avenue  
New York City

Chicago St Louis Philadelphia San Francisco

T. HOLT HAYWOOD DEPARTMENT

FRED'K VIETOR & ACHELIS

COMMISSION MERCHANTS

65-67 Leonard Street,

New York

COTTON FABRICS

OF ALL DESCRIPTIONS

For Manufacturers, Jobbers, Converters, Exporters

E. W. JORDAN  
Pres. and Treas.

J. L. BRANNAN  
Vice-Pres. and Gen. Mgr.

ATLANTIC TEXTILE COMPANY

SALISBURY, N. C.

Office:

Peoples Bank Bldg.

P. O. Box 644

GENERAL OVERHAULERS OF

COTTON MILL MACHINERY

We Overhaul, Move and Install

CARDING, SPINNING, SPOOLING, TWISTING, ETC.

Also Make Frame Alterations. Spindles Straightened and Repointed.  
Flyers Balanced and Repaired.

Correspondence Solicited  
Phone 765.

REEVES, JENNINGS & CO.

Selling Agents for Southern Mills Producing

COTTON FABRICS

For Converting, Manufacturing, Jobbing and Export Trades  
55 Leonard Street NEW YORK CITY

WELDING

All your broken machinery, Auto parts, Malleables, Steel, Aluminum and Cast Iron.

MILL MACHINERY A SPECIALTY

THE DODSON COMPANY, Autogenous Welding

PHONE MAIN 4434 1305 FORSYTH ST., ATLANTA, GA.

# SOLUBLE TALLOW

A pure tallow scientifically rendered soluble. A superior product to natural tallow. It will flow at ordinary temperatures, is antiseptically treated, and will not decompose or turn rancid. Will not impart a "sour" or disagreeable odor to the fabric, as will naturally beef tallow.

Special Products Works  
BALTIMORE, MD.

Refinery  
CORAOPOLIS, PA.

WM. C. ROBINSON & SON COMPANY

OF BALTIMORE

Since 1832

CHARLOTTE

GREENVILLE, S. C.

ATLANTA, GA.

## Want Department

If you are needing men for any position or have second hand machinery, etc., to sell the want columns of the **Southern Textile Bulletin** affords the best medium for advertising the fact.

For sale 1—Lowell Slasher single cylinder, Campwick size kettle.  
2—Thompkins Reels, 50 spindle adjustable.  
2—Box Head Whitin Spinning Frames.  
A-1 Condition.

HUNTER MACHINERY CO.  
Marion, N. C.

**Machinery For Sale.**  
1600 Draper Model E Looms 36-inch to 44-inch. Partial delivery could be made at once.  
4 H. & B. Slashers.  
Address P. O. Box 788, Pawtucket, R. I.

### Wanted.

One Dronsfield card mounting machine. Advise price and condition. Address B. S. R., care Southern Textile Bulletin.

### For Sale.

Four Dobson & Barlow 40-inch cards in first class condition. Can be inspected in operation now. Price \$1,200.00 f. o. b. cars. The Tyre Cord & Fabric Co., Columbus, Ohio.

### Spoolers Wanted.

Two spoolers, any make, to take a 6-inch spool, 3/4-inch diameter spindle, gauge not less than 4 1/4-inch. Also one second hand reel. Send description first letter. Address T. C. M., care Southern Textile Bulletin.

### For Sale.

One gear cutting machine made by the D. E. Whitin Co., in good condition. Write Monroe Cotton Mills, Monroe, Ga.

## Free Service Department

Any mill in need of superintendent, overseer, second hand, loom fixer, card grinder or any class of men other than operatives may insert a notice in this column for two weeks, free of charge. If the name of the mill is not given and the answers come care Southern Textile Bulletin, the cost of stamps used in forwarding replies must be paid by the advertiser.

### Wanted.

High class man for cloth room large Carolina mill. Address "Cloth", care Bulletin.

### Wanted.

Two or three loom fixers. Address "Fixer," care Southern Textile Bulletin.

### Second Hand.

Wanted second hand for carding; 195 cards in room; man accustomed to coarse work preferred. Also want a man with good habits and good references. Address Alabama, care of Textile Bulletin.

### Wanted.

One good cementer or burner; 45c per hour for cementer; 40c per hour for burner. None but workers need apply. Address Lowell Roller Covering Company, Lowell, N. C.

## All Wool Roller, Slasher and Clearer Cloth

F. C. HITCHCOCK CO.

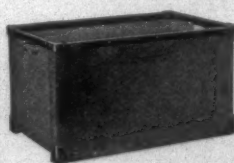
48 & 50 Pearl St.

BOSTON, MASS

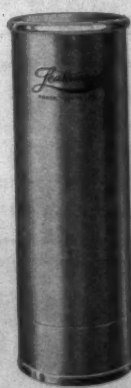
## Clark's Directory of Southern Cotton Mills

# Leatheroid

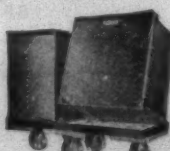
The Best Fibre Mill Equipment



Leatheroid Box



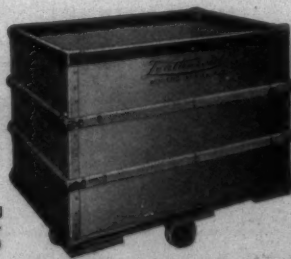
No. 1 Roving Can (Solid Fibre—rolled top)



Doffing Car



No. 2 Steel Clad Car Leatheroid and Steel.



No. 3 Mill Car All Leatheroid.

We specialize on Doffing Boxes, Roving Cans, Mill Cars, etc.  
Sold by Leading Southern Mill Supply Houses  
**ROGERS FIBRE CO.**

Leatheroid Sales Division  
24 Filbert Street PHILADELPHIA



## Standard Size of the South

The higher the cost of labor, and the higher the cost of raw materials, the more essential it becomes to have the Slasher-Room on an efficient basis. We cheerfully furnish to all interested our Slasher Efficiency Test Blanks.

THE SEYDEL MFG. COMPANY

JERSEY CITY, N. J.

Sizings

Softeners

Finishings

Agents,

S. C. Thomas and C. C. Clark  
Spartanburg, S. C.

## FOR SALE

Eleven Thousand Spindle Equipment for Ctmb Yarn.

**Atlanta Textile Machinery Co.**  
804 Austell Building  
Atlanta, Ga.

### WANTED

Man who is thoroughly competent of handling large room of Slashers, Tie-in Machines and two Draw-in Machines. Seven Dollars Per Day. References required. Men who are now overseers weaving are eligible for this position. Address Cotton Mill, care of Southern Textile Bulletin.

## EMPLOYMENT BUREAU

The fee for joining our employment bureau for three months is \$2.00 which will also cover the cost of carrying a small advertisement for one month.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only \$1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service in any employment bureau connected with the Southern Textile Industry.

WANT position as overseer spinning by young man. Can furnish good reference from all former employers; have been on present job as overseer spinning five years, but would change for larger job. Experienced on numbers from 3's to 26's warp and hosiery yarn. Address No. 2678.

WANT position as overseer of spinning. Have had eighteen years experience on all grades of cotton yarns. Am 34 years of age. Married and can furnish reference. Address No. 2679.

WANT position as superintendent of yarn mill of from 4,000 to 15,000 spindles. Have had 15 years experience as carder and spinner on fine and coarse yarns and can give good reference from present employer. Address No. 2680.

WANT position as overseer of carding in North Carolina or Virginia on white or colored work. Thirty-four years old and can give good reference. Address No. 2681.

WANT position as superintendent of spinning mill by man with experience on most all kinds of yarns and can furnish excellent reference. Address No. 2682.

WANT position as superintendent of yarn or weave mill of 10,000 spindles or more. Now employed as superintendent and can furnish reference as to character and ability. Address No. 2683.

WANT position as superintendent or carder in large mill. Now giving satisfaction as superintendent of two mills in different cities, and on account of having to be away from family would like to make change. Address No. 2684.

WANT position as superintendent, preferably in North Carolina. Must pay at least \$3,500 a year to begin. Have never been superintendent but thoroughly understand operation of mill and can back up statements with doing. Can get production. Address No. 2685.

WANT position as overseer of carding in large mill or carding and spinning in medium size mill. Can furnish good reference. Address No. 2686.

WANT position as superintendent on white or colored work or overseer of large weave room. Have been superintendent for 20 years and can furnish best of reference. Address No. 2687.

WANT position as superintendent or manager of cotton mill in Piedmont Carolina. Can furnish reference. Address No. 2688.

WANT position as overseer of spinning. Now employed as overseer of spinning and twisting and can furnish best of reference. Address No. 2689.

WANT position as superintendent or overseer of carding in large mill. Can furnish reference as to ability and character. Address No. 2690.

WANT position as overseer of carding by experienced mill man now employed but want larger job. Address No. 2692.

WANT position as superintendent or overseer of spinning if salary is large enough. Resigned former place on account of health but now fully recovered and ready to come promptly. Good reference as to character and ability. Address No. 2693.

WANT position superintendent of mill of from 10,000 to 30,000 spindles. Experienced on hosiery yarns and can furnish excellent references. Address No. 2695.

WANT position as carder at not less than \$50 per week. Age 33. Christian. Carrying up to date in methods and can

furnish references and will prove ability if given trial. Address No. 2696.

WANT position as superintendent by practical carder and spinner and carder. Just finished correspondence course on weaving. Address No. 2697.

WANT position as overseer of spinning. Now employed but want large room. Experienced on long and short staple, fine and coarse yarn, married. Good manager of help and can furnish reference. Address No. 2698.

WANT position as overseer of spinning or superintendent of small yarn mill. Can furnish references as to character and ability. Address No. 2700.

WANT position as overseer of weaving by good man with 31 years experience in mill, 12 as overseer. Prefer white work on Draper looms. Address No. 2702.

WANT position as overseer of carding in North Carolina mill. Can furnish good references as to character and ability. Address No. 2703.

WANT position as overseer of weaving on Draper looms running sheetings and. Have had 12 years experience in weave room. Now second hand in large mill. Can furnish good reference. Address No. 2705.

WANT position as superintendent of yarn mill or overseer of carding and spinning in large mill. Now employed as superintendent of small mill but wish to make change. 28 years old. Good reference. Address No. 2706.

WANT position as overseer of weaving by man with long experience on ducks, drills, twills, and sheeting. 18 years experience on Draper looms. Married, 39 years of age, and strictly sober. Now employed as overseer but for personal reasons would like change. Address No. 2707.

WANT position as overseer of weaving. Have worked in mill for 27 years and have had 25 years experience as overseer and fixer. Can furnish best of reference. Address No. 2708.

WANT position as overseer of card room by a hustler who can get results. Would take road job on good mill specialty. Address No. 2709.

WANT position as overseer of carding and spinning. Can furnish reference if wanted. Now employed as night spinner but want day work. Address No. 2710.

WANT position as master mechanic in good mill. Excellent references. Address No. 2711.

WANT position as overseer of cloth room by man with 10 years experience. Would not consider less than \$35 per week. Address No. 2712.

WANT position as superintendent of good mill. Long experience and can furnish reference. Address No. 2713.

WANT position as overseer carding by man with long experience on white and colored work. Married man 36 years old. Have had 15 years experience in card room. Strictly sober. Am holding position as overseer in card room at present. No cause for change except want better job. Can give good reference if wanted. Address No. 2714.

WANT position as overseer of weave room. Good reference as to character and ability. Address No. 2716.

WANT position as assistant superintendent or spinner or carder in large mill. Now employed but would like to change. Address No. 2719.

WANT position as overseer of weaving by married man, age 40. Have been working in weave room for 25 years, 7 years as overseer. Experience on all kinds of looms. Now overseer but want larger room. Address No. 2720.

WANT position as overseer of spinning in medium size mill. Married, 26 years old, 6 years experience as second hand and night overseer on Nos. from 20s to 100s. Want day job. Address No. 2721.

WANT position as superintendent of large mill. Have had long experience on all kinds of work and can give satisfaction. Address No. 2722.

WANT position as bookkeeper for cotton mill. Experienced double entry bookkeeper and general office man. Good

reference as to character and ability. Address No. 2723.

WANT position as superintendent or overseer of spinning in large mill. Have good record and can furnish reference. Address No. 2724.

WANT position as overseer of weave room. Good reference as to character and ability. Address No. 2725.

WANT position as overseer of weaving or second hand in large room with prospects of something better. Prefer good Draper loom job. 23 years practical experience. Address No. 2726.

WANT position as overseer of card room by man with 14 years experience as overseer. Good manager of help. Must be large room or would take superintendents job. Can make change quick. Present location is only reason for change. Address No. 2727.

WANT position as superintendent of spinning mill or plain weave mill. Long experience on both carded and combed yarn. Reference from past and present employers. Address No. 2728.

WANT position as superintendent or overseer of spinning in large mill. 38 years old, married, 12 years as overseer. Best of reference. Address No. 2729.

WANT position as chief engineer of master mechanic or both. Thoroughly experienced on steam, electric and water. 18 years practical experience and 3 years in college. Address No. 2730.

WANT position as superintendent of yarn mill or overseer of carding. Would consider new mill and take some stock in same. Address No. 2731.

WANT position as superintendent by man with long practical experience and good character. Can produce the goods. Address No. 2732.

WANT position as superintendent by man with experience on all kinds of work. Good manager. Can furnish best of reference. Address No. 2733.

WANT position as overseer of carding in large mill, or carding and spinning in medium size mill or superintendent of small mill that pays fair salary. At present overseer of carding. Good reasons for change. Address No. 2734.

WANT position as superintendent of yarn mill anywhere in South that needs a hustler that can hold help and get results. Now overseer of carding and spinning. Age 35. Address No. 2735.

WANT position as superintendent of yarn mill. Have had experience on various kinds of work and am thoroughly competent. Can hold help and know what production is and can get it. Address No. 2738.

WANT position as master mechanic and electrician. Experienced in all kinds of shop work and power. Good reference. Address No. 2739.

WANT position as carder or spinner in large mill or carder and spinner in small mill. Address No. 2740.

WANT position as overseer of carding by man with experience and ability to get production. Good reference. Address No. 2741.

WANT position as superintendent of ing. Now employed but want to get on combed and carded yarns and weaving. No wemplyed but want to get back in Carolinas. Address No. 2742.

WANT position as carder in large mill or carder and spinner in small mill. Good reference as to character and ability. Address No. 2743.

WANT position as overseer of spinning. Married, 33 years old. Good manager of help and a hustler for production. Can get good help and hold it. Address No. 2744.

WANT position as superintendent of weaving or yarn mill, or overseer of carding in large mill. Have been overseer of carding for some time but resigned for good reasons and have reference from all employers. Can come at once. Address No. 2745.

WANT position with progressive mill that has good village and doing welfare work. Now office man doing work from making out pay rolls to financial reports. Have sister who is experienced welfare worker. Would like to locate in Carolinas with large mill keep use. Good references as to character

both of us in our respective lines. Willing workers and can give satisfaction and service. Address No. 2746.

WANT position as electrical graduate, 15 years experience installing, operating, testing, inspecting, maintenance and repair of switchboards, generators, motors, speed controllers, etc., selecting electrical equipment, handle labor, all kind wiring work for light and power service. Desire responsible position as electrical engineer, electrical supt. or chief electrical. Married, age 36 years. Employed, but available on short notice. State salary for man competent to take complete charge of electrical department. Address No. 2748.

WANT position as overseer of carding or spinning in large mill or both in small mill or superintendent. Energetic young man with experience in two or three large mills. Good reference. Address No. 2747.

WANT position as assistant superintendent or assistant manager of cotton mill. Have high technical education in textile manufacture and valuable experience in a managerial capacity. Address No. 2749.

WANT position as overseer of weaving or superintendent. Reference as to character and ability. Address No. 2750.

WANT position as superintendent of good mill by man now employed, and giving satisfaction but for good reasons wish to make change. Address No. 2751.

WANT position as superintendent or overseer of spinning in good mill in Carolinas or Virginia. Now employed as superintendent in far Southern mill and want to get back near home on account of health. Good reference. Address No. 2752.

WANT position as superintendent of medium size mill. Now employed but wish to change for good reasons. Can furnish reference if wanted. Address No. 2753.

WANT position as assistant superintendent of large mill or manager or superintendent of small mill. Long practical experience and graduate of Ga. Tech of 1911. References from past employers. Address No. 2754.

WANT position of superintendent of either yarn or weaving mill. 39 years of age. Experienced on 8s to 80s. Combed and carded yarns. Can furnish best reference. Now employed would like to correspond with parties needing a good man. Address No. 2756.

WANT position as pay-roll clerk in large textile mill by a young man. Married. With five years practical experience, thoroughly conversant with production records of varied sizes of hank-roving and yarns, can operate a comptometer. Address No. 2757.

WANT position as superintendent of small or medium size yarn mill. I have sixteen years experience as overseer of carding and spinning, twisting, winding, ruling, etc., and have eight years experience as superintendent. I would consider an overseers position. Am experienced on coarse and fine numbers, on white and colored yarns. Can furnish best of reference as to character and ability. I am 46 years old and have a family. Address No. 2758.

WANT position as overseer of weaving in good mill. Now employed and giving satisfaction but want larger room. Address No. 2759.

WANT position as overseer of weaving. Now employed and getting over 100% production with less than 1% seconds. Want larger job and can furnish best of reference. Address No. 2760.

WANT position as superintendent of either yarn or plain weaving mill or as carder and spinner. Am now employed and giving satisfaction and have had long experience on both carding and spinning. Good references. Address No. 2761.

WANT position as overseer of spinning in 30,000 or 40,000 spindle mill. Have had 12 years experience as overseer. 39 years of age, married and can furnish best of reference. Address No. 2762.

WANT position as superintendent, overseer of carding or spinning or both. Address No. 2776.

# ALPHABETICAL LIST OF ADVERTISERS

—A—  
Abell-Howe Co., Michigan Ave., Chicago, Ill.  
Aladdin Co., The, Bay City, Mich.  
Allen, Chas. R., Charleston, S. C.  
Allen Spindle Corporation, 80 Boylston St., Boston, Mass.  
Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
American Audit Co., The, Atlanta, Ga.  
American Kron Scale Co., 430 E. 53rd St., New York.  
American Moistening Co., Boston, Mass.  
American Textile Banding Co., Philadelphia, Pa.  
American Trust Co., Bond Dept., Charlotte, N. C.  
American Vulcanized Fibre Co., Wilmington, Del.  
Annex Hotel, New York.  
Arabol Mfg. Co., New York.  
Ashworth Bros., Charlotte, N. C.  
Atherton Pin Grid Bar Co., Providence, R. I.  
Atlanta Gas Light Co., Atlanta, Ga.  
Atlanta Paper Co., Atlanta, Ga.  
Atlantic Dyestuff Co., 88 Ames Bldg., Boston, Mass.  
Atlantic Textile Co., Salisbury, N. C.  
—B—  
Barber Colman Co., Rockford, Ill.  
Barber Mfg. Co., Lowell, Mass.  
Belcher Heating & Plumbing Co., Atlanta, Ga.  
Bosson & Lane, Atlantic, Mass.  
Brown Co., David, Lawrence, Mass.  
Butterworth & Sons Co., H. W., Philadelphia, Pa.  
—C—  
Cahill Iron Works, Chattanooga, Tenn.  
Campbell, John, & Co., New York.  
Carolina Size & Chemical Co., Charlotte, N. C.  
Carrier Engineering Corp., New York.  
Carter, A. B., Greenville, S. C.  
Catlin & Co., 345 Broadway, New York.  
Chaffee Co., Thos. K., Providence, R. I.  
Champion Chemical Co., Asheville, N. C.  
Charlotte Leather Belting Co., Charlotte, N. C.  
Chicago Fuse Mfg. Co., Chicago, Ill.  
Clark Mfg. Co., H. E., Box 372, Atlanta, Ga.  
Cocker Machine & Foundry Co., Gastonia, N. C.  
Collins Bros. Machine Co., Pawtucket, R. I.  
Corn Products Refining Co., New York.  
Cotton States Belting & Supply Co., Atlanta, Ga.  
Courtney Co., Dana S., Chicopee, Mass.  
—D—  
Dobbins Sosp Mfg. Co., Philadelphia.  
Dodson Co., Atlanta, Ga.  
DeLaval Steam Turbine Co., Trenton, N. J.  
Detroit Graphite Co., Detroit, Mich.  
Dixon Lubricating Saddle Co., Bristol, R. I.  
Diamond State Fibre Co., Bridgeport, Pa.  
Dixie Paper & Box Co., Atlanta, Ga.  
Doak, James, Greenville, S. C.  
Draper, E. S., 506 Trust Bldg., Charlotte, N. C.  
Draper Corp., Hopedale, Mass.  
E. I. du Pont de Nemours & Co., Wilmington, Del.  
Dunn & Co., 15 W. Trade, Charlotte, N. C.

—E—  
East Jersey Pipe Co., Patterson, N. J.  
Emmons Loom Harness Co., Lawrence, Mass.  
—F—  
Eureka Iron Works, Inc., Lincolnton, Farnsworth Co., Conshohocken, Pa.  
Felton Brush Co., D. D., Atlanta, Ga.  
Franklin Process Co., Providence, R. I.  
—G—  
Gantt, M. L., Salisbury, N. C.  
Garland Mfg. Co., Saco, Me.  
General Electric Co., Schenectady, N. Y.  
General Concrete Construction Co., Charlotte, N. C.  
Griswold Supply Co., Macon, Ga.  
Greenville Textile Supply Co., Greenville, S. C.  
—H—  
Hine Bros., 80 Maiden Lane, New York.  
Hirsch Lumber Co., 1203 Heard Nat. Bank Bldg., Jacksonville, Fla.  
Hitchcock Co., F. C., 50 Pearl St., Boston, Mass.  
Huntington & Guerry, Greenville, S. C.  
Hyatt Roller Bearing Co., 100 West 41st St., New York.  
—I—  
Ilg Electric Ventilating Co., Chicago, Ill.  
Ivey Manufacturing Co., Hickory, N. C.  
—J—  
Jones Machinery Co., Atlanta, Ga.  
New York, N. Y.  
—K—  
Kaumagraph Co., 209 W. 38th St., New York.  
Kaustine Co., Buffalo, N. Y.  
Keever Starch Co., Greenville, S. C.  
Klipstein & Co., A., New York.  
—L—  
Ladew Co., Edw. R., Glen Cove, N. Y.  
Link Belt Co., Michigan Ave., Chicago, Ill.  
Lowry Co., The, Atlanta, Ga.  
The Lovingood Co., Atlanta, Ga.  
Lockwood, Greene & Co., Boston, Mass.  
Lyster Chemical Company, 61 Broadway, New York.  
—M—  
Macrodi Fibre Co., Woonsocket, R. I.  
Marston Co., John P., 247 Atlantic Ave., Boston, Mass.  
Mason Machine Works, Taunton, Mass.  
Masury-Young Co., 196 Milk St., Boston, Mass.  
Mauney Steel Co., Philadelphia, Pa.  
Merrow Machine Co., Hartford, Conn.  
Metallic Drawing Roll Co., Indian Orchard, Mass.  
Metz & Co., H. A., 122 Hudson St., New York.  
Millers Indemnity Underwriters, Greenville, S. C.  
Monarch Bobbin Cleaner Co., Union, S. C.  
Montgomery & Crawford, Spartanburg, S. C.  
Morehead Mfg. Co., Detroit, Mich.  
Morse Chain Co., Ithaca, N. Y.  
Frank Mossberg Co., Attleboro, Mass.  
McNaughton Mfg. Co., Maryville, Tenn.  
—N—  
National Aniline & Chemical Co., New York.  
National Gum & Mica Co., Charlotte, N. C.  
New Brunswick Chemical Co., New Brunswick, N. J.

N. Y. & N. J. Lubricant Co., 165 Broadway, New York.  
N. Y. Leather Belting Co., Brooklyn, N. Y.  
Newport Chemical Works, Passaic, N. J.  
Norwood Engineering Co., Florence, Mass.  
—O—  
Odell Hardware Co., Greensboro, N. C.  
—P—  
Parks-Cramer Co., Fitchburg, Mass.  
Pawtucket Spinning Ring Co., Central Falls, R. I.  
Pasco Tool Co., Atlanta, Ga.  
Peaslee-Gaulbert Co., Louisville, Ky.  
Perry-Mann Electric Co., Columbia, S. C.  
Player, E. S., Greenville, S. C.  
Powers Regulator Co., The, Chicago, Ill.  
Proctor & Schwartz, Philadelphia, Pa.  
Puro-Sanitary Drinking Fountain Co., Haydenville, Mass.  
—R—  
Reeves, Jennings & Co., 55 Leonard St., New York.  
Rice Dobby Chain Co., Millbury, Mass.  
Robinson & Sons Co., Wm. C., Baltimore, Md.  
Rogers Fibre Co., 121 Beach St., Boston, Mass.  
Roessler & Hasselacher Chemical Co., 709 Sixth Avenue, New York.  
Roy & Sons Co., B. S., Worcester, Mass.  
Rumsey Pump Co., Seneca Falls, N. Y.  
—S—  
Saco-Lowell Shops, Charlotte, N. C.  
Sargenta Sons Corp., C. G., Graniteville, Mass.  
Scaife & Sons Co., Wm. B., Oakmont, Pa.  
Scott & Co., Henry L., Providence, R. I.  
Screw Machine Products Corp., Providence, R. I.  
Seidel Mfg. Co., Jersey City, N. J.  
Shambow Shuttle Co., Woonsocket, R. I.  
Sirrline, J. E., Greenville, S. C.  
Southern Cotton Oil Co., Savannah, Ga.  
Sonneborn & Sons, Inc., L., 262 Pearl St., New York.  
Southern Motors Corp., Charlotte, N. C.  
Southern Spindle & Flyer Co., Charlotte, N. C.  
Southern States Supply Co., Columbia, S. C.  
Southern Engineering Co., Charlotte, N. C.  
Spartan Sizing Compound Co., Spartanburg, S. C.  
Staley Mfg. Co., A. E., Decatur, Ill.  
Stafford Co., Readville, Mass.  
Stallings Co., E. L., Spartanburg, S. C.  
Sullivan Hdw. Co., Anderson, S. C.

Standard Fibre Co., Somerville, Mass.  
Steel Heddle Mfg. Co., Philadelphia, Pa.  
Stein, Hall & Co., 61 Broadway, New York.  
Stephenson Co., The, Atlanta, Ga.  
Swan & Finch Co., New York.  
Sydnor Pump & Well Co., Richmond, Va.  
—T—  
Terrell Machine Co., Charlotte, N. C.  
Texas Co., The, 17 Battery Place, New York.  
Textile Banking Co., New York.  
Textile Mill Supply Co., Charlotte, N. C.  
Thomas Grate Bar Co., Birmingham, Ala.  
Toledo Scale Co., Raleigh, N. C.  
Tolhurst Machine Works, Troy, N. Y.  
Tripod Paint Co., 68 N. Broad St., Atlanta, Ga.  
J. Spencer Turner Co., Charlotte, N. C.  
Turner Construction Co., Atlanta, Ga.  
Tuxbury Lumber Co., A. C., Charleston, S. C.  
—U—  
United Chemical Products Corp., York & Colgate Sts., Jersey City, N. J.  
U. S. King Traveler Co., Providence, R. I.  
Universal Winding Co., Boston, Mass.  
—V—  
Veeder Mfg. Co., Hartford, Conn.  
Haywood Dept., T. Holt, 65 Leonard St., New York.  
Virginia Carolina Supply Co., Richmond, Va.  
Vogel Co., Jos. A., Wilmington, Del.  
—W—  
Wadsworth, Howland & Co., Boston, Mass.  
Walker Electric & Plumbing Co., Atlanta, Ga.  
Walker-Tompkins Co., Charlotte, N. C.  
Walraven Co., The, Atlanta, Ga.  
Walsh & Weldner Boiler Co., Chattanooga, Tenn.  
Warwick Co., A. J., Memphis, Tenn.  
Watts, Stebbins & Co., 44 Leonard St., New York.  
Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.  
Wheeler Condenser & Engineering Co., Carteret, N. J.  
Whitin Machine Works, Whitinsville, Mass.  
Whitinsville Spinning Ring Co., Whitinsville, Mass.  
Clarence Whitman & Son, New York.  
Wingfield & Hundley, Richmond, Va.  
Wilson Co., Greenville, S. C.  
Wolf & Co., Jacques, Passaic, N. J.  
Woonsocket Machine & Press Co., Woonsocket, R. I.  
—Y—  
Yadkin Brick Yards, New London, N. C.

Fire Without Having A Cleaning Period On



For Use with Either Natural, Induced or Forced Draft  
FOR DETAILED INFORMATION WRITE

THOMAS GRATE BAR COMPANY  
BIRMINGHAM, ALA.

## Ashworth Brothers, Inc. Tempered and Side Ground Card Clothing

Tops Reclothed

Lickerins Rewound

Cotton Mill Machinery Repaired

12 to 18 West Fourth St., Charlotte, N. C.

240 River Street, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

# CLASSIFIED LIST OF ADVERTISERS

- AIR CONDITIONERS**—  
Parke-Cramer Company
- AIR COMPRESSORS**—  
Allis-Chalmers Mfg. Co.  
Power Regulator Company
- AIR WASHERS AND COOLERS**—  
(See Humidifying).
- ARCHITECTS**—  
Draper, E. S. (Landscapes).  
J. E. Sirls.  
Lockwood, Green & Co.
- ARMATURE WINDING**—  
Charlotte Electric Repair Co.  
Wingfield & Hundley.
- ASH HANDLING EQUIPMENT**—  
Link-Belt Company.
- AUTOMATIC FEEDS FOR COTTON**—  
Philadelphia Textile Machinery Co.  
Saco-Lowell Shops.  
Whitin Machine Works
- AUTOMATIC REGULATORS**—  
Power Regulator Company
- AUTOMATIC SCALES**—  
American Kron Scale Co.  
Toledo Scale Co.
- BALING PRESSES**—  
Saco-Lowell Shops  
Woonsocket Machine and Press Co.
- BALL BEARINGS**—  
Hyatt Roller Bearing Co. (Roller)
- BALLERS**—  
Saco-Lowell Shops.
- BANKS**—  
Textile Banking Co.  
American Trust Co.
- BAROMETERS**—  
Tagliabue Mfg. Co., C. J.
- BANDING**—  
American Textile Banding Co., Inc.  
Barber Mfg. Co.
- BEAMERS**—  
Saco-Lowell Shops.
- BEAMING AND WARPING M'CHY**—  
Crompton & Knowles Loom Works.  
Draper Corporation  
Mossberg Co., Frank  
Saco-Lowell Shops
- BEARING, BALL**—  
(See Ball Bearings)
- BEARINGS, ROLLER**—  
(See Roller Bearings)
- BELT CONVEYORS**—  
Link-Belt Company
- BELT LACING LEATHER**—  
Charlotte Leather Belting Co.  
Edw. R. Ladew Co., Inc.  
New York Leather Belting Co.
- BELTING (LEATHER)**—  
Bradford Belting Co.  
Charlotte Leather Belting Co.  
Edw. R. Ladew Co., Inc.  
New York Leather Belting Co.  
Wilson Co.
- BELTING, SILENT CHAIN**—  
Abell Howe Co.  
Link-Belt Co.  
Morse Chain Co.
- BELT CEMENT**—  
Ladew & Co., E. R.  
New York Leather Belting Co.
- BELT DRESSING**—  
Ladew & Co., E. R.  
New York Leather Belting Co.
- BLEACHING MATERIALS**—  
United Chemical Products Corp.  
Wm. C. Robinson & Son Co.  
Arabol Mfg. Co.  
Atlantic Dyestuff Co.  
Bosson & Lane  
Kilpstein & Co.  
Roessler & Hasselacher Chemical Co.  
Lyster Chemical Co.  
National Aniline and Chemical Co.  
Newport Chemical Works.  
Seydel Mfg. Co.
- BLOWERS**—  
Parke-Cramer Co.  
Ilg Electric Co.  
Clark, H. E., Mfg. Co.
- BOBBIN CLEANER**—  
Terrell Machine Co.
- BORING AND SPOOLS**—  
Dana S. Courtney Co.  
Draper Corporation  
David Brown Co.  
Mossberg Co., Frank  
Marandti Fibre Co.  
A. B. Carter
- BOILERS**—  
Walsh & Weldner Co.
- BOILER HOUSE CONVEYORS**—  
Link-Belt Co.
- BRICK**—  
Yadkin Brick Co.
- CALL SYSTEMS**—  
Screw Machine Products Corp.
- COTTON OPENERS AND LAPPERS**—  
Firth, Wm.  
Saco-Lowell Shops  
Whitin Machine Works
- BROOMS**—  
Montgomery & Crawford  
Dunn & Co.  
Wilson Co.
- BUNGALOWS**—  
Aladdin Company, The  
Tuxbury, A. C., Lumber Co.
- BUILDINGS**—  
Lockwood, Green & Co.  
Turner Construction Co.
- CARD CLOTHING**—  
Ashworth Bros.  
Jos. Sykes Bros.  
Saco-Lowell Shops  
The Whitin Machine Works.
- CARD GRINDERS**—  
B. S. Roy & Sons Co.  
The Whitin Machine Works
- CARDS**—  
Saco-Lowell Shops  
Whitin Machine Works
- CENTRIFUGAL EXTRACTORS**—  
Gillespie Motor Company  
Tolhurst Machine Works.
- CHAIN DRIVES, SILENT**—  
Abell Howe Co.  
Link-Belt Company  
Morse Chain Co.
- CLOTH ROOM MACHINERY**—  
Saco-Lowell Shops
- COAL AND ASHE CARRIERS**—  
Link-Belt Company
- COMMISSION MERCHANTS**—  
Reeves, Jennings Co.  
Fred'k Viotor & Achells  
Clarence Whitman & Son  
Watts, Stebbin & Co.
- COMPRESSORS (AIR)**—  
General Electric Company
- CONCRETE**—  
General Concrete Cons. Co.  
Turner Construction Co.
- CONCRETE CONSTRUCTION**—  
Turner Construction Co.
- COOLING TOWERS**—  
Wheeler Condenser & Engineering Co.
- CONDENSERS**—  
Farnsworth Company  
Wheeler Condensing & Engineering Co.
- CONNECTORS, FRANKEL SOLDERLESS**—  
Westinghouse Electric & Mfg. Co.
- COTTON MACHINERY**—  
Ashworth Bros.  
Barber-Colman Co.  
Butterworth, H. W., & Sons Co.  
Dixon Lubricating Saddle Co.  
Draper Corporation  
Firth, Wm.  
Jones Machinery Co.  
Mason Machine Works  
Metallic Drawing Roll Co., The  
Philadelphia Textile Machinery Co.  
Roy & Son Co., B. S.  
Saco-Lowell Shops  
Terrell Machine Co.  
Whitin Machine Works  
Whitinsville Spinning Ring Co.
- COTTON SOFTENERS**—  
United Chemical Products Corp.  
Wm. C. Robinson & Son Co.  
Arabol Mfg. Co.  
Bosson & Lane  
Kilpstein & Co., A.  
Seydel Mfg. Co., The
- COTTON WASTE MACHINERY**—  
Firth, Wm.  
Saco-Lowell Shops  
Whitin Machine Works
- COTTON FABRICS**—  
Reeves, Jennings Co.  
J. Spencer Turner Co.  
Fred'k Viotor & Achells
- COTTON YARNS**—  
Mauney-Steel Company  
J. Spencer Turner Co.
- CREDIT INFORMATION**—  
American Credit Indemnity Co.
- DIAL SCALES**—  
American Kron Scale Co.  
Toledo Scale Co.
- DISINFECTANTS**—  
Wm. C. Robinson & Son Co.  
Masury Young Co.  
The Seydel Mfg. Co.
- DOBBIES**—  
The Stafford Company  
The Whitin Machine Works
- DOBBY CHAIN**—  
Rice Dobby Chain Co.
- DOFFING BOXES**—  
Fibre Specialty Mfg. Co.  
Lanieroid Sales Co.  
Standard Fibre Co.  
Diamond States Fibre Co.
- DOUBLERS**—  
Saco-Lowell Shops  
Universal Winding Co.
- DRAWING ROLLS**—  
Metallic Drawing Roll Company
- DRINKING FOUNTAIN**—  
Purn Sanitary Drinking Fountain Co.
- DRIVES, SILENT CHAIN**—  
Abell Howe Co.  
Link-Belt Company  
Morse Chain Co.
- DRYERS, CENTRIFUGAL**—  
Tolhurst Machine Works.  
Gillespie Motor Company
- DUSTLESS CARD STRIPPERS**—  
William Firth
- BRUSHES**—  
D. D. Felton Brush Co.
- CASES, PACKING**—  
(See Boxes)
- DYEING, DRYING, BLEACHING AND GREASES**—  
LOCKERS, METAL—  
H. W. Butterworth & Sons  
Philadelphia Textile Machinery Co.  
Saco-Lowell Shops  
C. G. Sargents Sons Corp.  
DRAWING FRAMES—  
Saco-Lowell Shops
- DYESTUFFS AND CHEMICALS**—  
Wm. C. Robinson & Son Co.  
Arabol Mfg. Co.  
Atlantic Dyestuff Co.  
Bosson & Lane.  
Du Pont de Nemours & Co.  
Hine Bros.  
A. Kilpstein & Co.  
Lyster Chemical Co.  
Metz, H. A. & Co., Inc.  
National Aniline and Chemical Co.  
New Brunswick Chemical Co.  
Newport Chemical Works.  
Jaques Wolf & Co.  
Roessler & Hasselacher Chemical Co.  
Southern Dyestuffs and Chemical Co.  
The Seydel Mfg. Co.  
L. Sonneborn & Sons.  
Campbell, John, & Co.  
United Chemical Products Corp.
- DYEING MACHINES**—  
Delahunty Dyeing Machine Co.  
Franklin Process Co.
- ELECTRICAL CONSTRUCTION**—  
Allis Chalmers Mfg. Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.
- ELECTRIC LAMPS**—  
Robinson, F. E.  
Perry-Mann Electric Co.
- ELECTRIC MOTORS**—  
(See Motors)
- ELECTRICAL MACHINERY**—  
Allis Chalmers Mfg. Co.  
General Electric Co.  
Wingfield & Hundley.  
Westinghouse Electric & Mfg. Co.
- ELECTRICAL CONTRACTORS**—  
Huntington & Guerry  
F. E. Robinson.  
Walker Electric & Plumbing Co.
- ELECTRICAL ENGINEERS**—  
Huntington & Guerry  
Michael & Bivins, Inc.
- ELECTRICAL M'CHY REPAIRING**—  
Cocker Machine & Foundry Co.  
Charlotte Electric Repair Co.  
Michael & Bivins, Inc.  
Wingfield & Hundley.
- ELEVATORS AND CONVEYORS**—  
Link-Belt Company
- ELECTRICAL SUPPLIES**—  
Greenville Textile Supply Co.  
Montgomery & Crawford.  
Greenville Textile Supply Co.
- ENGINEERS**—  
Mees & Mees  
J. E. Sirls
- EXTRACTORS**—  
East Jersey Pipe Co.  
Tolhurst Machine Works
- FANS AND BLOWERS**—  
Ilg Electric Ventilating Co.
- FEED WATER PUMPS**—  
Morehead Mfg. Co.  
Farnsworth Co.
- FINISHERS-COTTON**—  
United Chemical Products Corp.  
Wm. C. Robinson & Son Co.  
Stein, Hall & Co.  
A. Kilpstein & Company  
Metz, H. A. & Co., Inc.
- FINISHING MACHINERY**—  
(See Dyeing, Drying and Finishing Machinery).
- FIRE HOSE AND FITTING**—  
American Supply Co.
- FILTERS**—  
Norwood Engineering Co.
- FLOOR CLEANERS**—  
Champlon Chemical Co.
- FLUTED ROLLS**—  
Firth, William  
Metallic Drawing Roll Co.  
Whitin Machine Co.
- FLYER PRESSERS**—  
Southern Spindle & Flyer Co.
- FUSES**—  
Chicago Fuse Mfg. Co.
- FLYERS**—  
Southern Spindle & Flyer Co.  
The Whitin Machine Works
- GEARS (SILENT)**—  
General Electric Company
- GENERATORS**—  
Allis Chalmers Mfg. Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.
- GRINDING MACHINERY**—  
B. S. Roy & Sons Co.
- GRINDERS (CARD)**—  
B. S. Roy & Sons Co.
- GRATES**—  
McNaughton Mfg. Co.  
Bureka Iron Works  
Thomas Grate Bar Co.
- GREASES**—  
Wm. C. Robinson & Son Co.  
Swan & Finch Co.
- GRID BARS**—  
Atherton Plin Grid Bar Co.
- HEATING CONTRACTORS**—  
Walker Electric & Plumbing Co.  
Walker-Tompkins Co.
- HEDDLES**—  
Steel Heddle Mfg. Co.
- HOTELS**—  
Annex Hotel
- HOUSES**—  
Aladdin Company, The
- HOSIERY MACHINES**—  
Morrow Machine Co.
- HUMIDIFIERS**—  
American Moistening Company  
Carrier Engineering Corporation  
Parke-Cramer Company  
C. G. Sargeant's Sons Corporation
- HYDROMETERS**—  
Tagliabue Mfg. Co., C. J.
- HYDRO EXTRACTORS**—  
Tolhurst Machine Co.  
Gillespie Motor Company
- INSURANCE (LIABILITY)**—  
Bailey & Collins
- KNOTTERS**—  
Barber-Colman Co.
- LACE LEATHER**—  
(See Belt Lacing Leather).
- LAMPS, ELECTRIC**—  
Perry-Mann Electric Co.  
Robinson, F. E.
- LATHES**—  
Montgomery & Crawford  
Walraven Co.
- LANDSCAPE ARCHITECT**—  
E. S. Draper
- LIABILITY INSURANCE**—  
Bailey & Collins.
- LOOMS**—  
Draper Corporation  
Saco-Lowell Shops  
Mason Machine Works  
Stafford Company
- LOCKERS, METAL**—  
J. D. Collins
- LOOM HARNESS**—  
Mason Machine Works  
Garland Mfg. Co.  
Steel Heddle Mfg. Co.
- LUMBER**—  
Hirsch Lumber Co.  
Tuxbury, A. C., Lumber Co.
- LUBRICANTS**—  
Masury Young Co.  
N. Y. & N. J. Lubricant Co.  
Wm. C. Robinson & Sons Co.  
Swan & Finch Co.  
L. Sonneborn Sons, Inc.
- MACHINE TOOLS**—  
Walraven Co.  
Pasco Tool Co.
- MARKERS**—  
Kaumagraph Co.
- MERCERIZING MACHINERY**—  
Butterworth, H. W. & Sons Co.  
Whitin Machine Works
- METAL PAINT**—  
Peaslee-Gaulbert Co.
- METALLIC ROLLS**—  
Metallic Drawing Roll Co.
- METERS**—  
Allis Chalmers Mfg. Co.  
General Electric Company  
Westinghouse Electric & Mfg. Co.
- MILL CRAYONS**—  
American Supply Co.
- MILL STOCKS**—  
Hill, Clark & Co.  
A. M. Law & Co.
- MILL CONSTRUCTION**—  
Lockwood, Green & Co.  
Turner Construction Co.
- MILL SUPPLIES**—  
American Supply Co.  
Bivins Lubricating Saddle Co.  
Garland Mfg. Co.  
Ivey Mfg. Co.  
Jones Machinery Co.  
Textile Mill Supply Co.  
Thomas Grate Bar Co.  
Perry-Mann Electric Co.  
Robinson, F. E.  
Montgomery & Crawford  
Sullivan Hardware Company  
Smith Courtney Co.  
Orell Hardware Co.  
Bureka Iron Works  
Walraven Co.  
Pasco Tool Co.  
Wilson Co.  
Sullivan Hdw. Co.  
Diamond States Fibre Co.  
Greenville Textile Supply Co.
- MOTORS**—  
Allis Chalmers Mfg. Co.  
General Electric Co.  
Westinghouse Electric & Mfg. Co.  
Wingfield & Hundley.  
Walraven Co.  
Westinghouse Electric & Mfg. Co.
- OILS**—  
Wm. C. Robinson & Sons Co.  
L. Sonneborn Sons, Inc.  
Southern Cotton Oil Co.  
Wadsworth, Howland & Co.

## CLASSIFIED LIST OF ADVERTISERS

### OPENING MACHINERY—

Saco-Lowell Shops  
Whitin Machine Works

### OVERSEAMING AND OVEREDGING

MACHINES—

Marrow Machine Co.

### OVERHAULERS—

Southern Spindle & Flyer Co.

Atlantic Textile Co.

### PACKINGS, LEATHER—

New York Leather Belting Co.

### PAINT—

Detroit Graphite Company

Johnson Paint Co.

Peaslee-Gaubert Co.

Southern Cotton Oil Co.

Thos. K. Chaffee Co.

Tripod Paint Co.

Wadsworth, Howland & Co.

### PICKERS AND LAPPERS—

Woonsocket Machine & Press Co.

Whitin Machine Works

### PICKER STICKS—

Ivey Mfg. Co.

Garland Mfg. Co.

### PIPE AND FITTINGS—

Parks Cramer Co.

Walraven Co.

### PLUMBERS—

Belcher Plumbing & Heating Co.

M. L. Gantt.

Jas. Doak

Kautsine Co.

Stephenson Company

E. L. Stallings Co.

Walker Electric and Plumbing Co.

Walker-Tompkins Co.

### PLUMBERS SUPPLIES—

Joseph A. Vogel Co.

Cahill Iron Works (The)

Virginia-Carolina Supply Co.

Southern States Supply Co.

Lowry Company (The)

Walraven Co.

### PORTABLE ELEVATORS—

J. D. Collins

### POWER TRANSMISSION

MACHINERY—

Abell-Howe Co.

Allis-Chalmers Mfg. Co.

General Electric Co.

Hyatt Roller Bearing Co.

Link-Belt Company

Morse Chain Co.

Westinghouse Electric & Mfg. Co.

Whitin Machine Works.

Odell Hardware Co.

Walraven Co.

### PRESSES—

Butterworth, H. W., & Sons Co.

Saco-Lowell Shops

### PRINTERS—

Clark Publishing Co.

### PREPARATORY MACHINERY—

Draper Corporation

The Whitin Machine Works

Saco-Lowell Shops

### PULLEYS—

(See Power Transmission Machinery).

### PUMPS, BOILER FEED—

Farnsworth Company

### PUMPS, CENTRIFUGAL—

Allis-Chalmers Mfg. Co.

DeLaval Steam Turbine Co.

### PUMPS, DEEP WELL—

Signor Pump & Well Co.

Rumsey Pump Co.

### QUILL CLEANER—

Terrell Machine Co.

### REGULATORS—

Tagliabue Mfg. Co.

Power Regulator Company

### REPAIRERS—

Cotton States Wagon Co.

### RING TRAVELERS—

American Supply Co.

U. S. Ring Traveler Co.

### RING SPINNING FRAMES—

Fales & Jenks Machine Co.

Whitin Machine Works

Saco-Lowell Shops

### ROLLS—

American Supply Co.

The Whitin Machine Works

Metallic Drawing Roll Co.

Saco-Lowell Shops

Southern Spindle & Flyer Co.

### ROOFING PAINT—

Detroit Graphite Co.

Peaslee-Gaubert Co.

Johnson Paint Co.

Walraven Co.

### ROLLER BEARINGS—

Hyatt Roller Bearing Co.

Allen Spindle Corporation

### ROLLER CLOTH—

Hitchcock, F. C., Company

### ROOFING—

Atlanta Gas Light Co.

Walraven Co.

### ROVING CANS AND BOXES—

American Vulcanized Fiber Co.

Rogers Fibre Co.

Standard Fibre Co.

Willson Co.

A. B. Carter

Diamond States Fibre Co.

### ROVING MACHINERY—

Whitin Machine Works

Saco-Lowell Shops

### SADDLES—

Dixon Lubricating Saddle Co.

### SANITARY FOUNTAINS—

(See Drinking Fountains)

### SCALES—

American Kron Scale Co.

Toledo Scale Co.

### SCOURING POWDERS—

Champion Chemical Co.

Dobbins Soap Mfg. Co.

### SEWING MACHINES—

Marrow Machine Co.

### SEPARATORS—

Draper Corporation

### SHAFTING, HANGERS, ETC.—

(See Power Transmission Machinery).

### SHELL STITCH MACHINES—

Marrow Machine Co.

### SHRUBBERY—

J. Van Lindley Nursery Co.

### SHUTTLES—

Draper Corporation

Shamrow Shuttle Co.

David Brown Co.

### SIZING COMPOUNDS—

Allen, Charles R.

Atlantic Dyestuff Co.

Arabol Mfg. Co.

Bosson & Lane

Carolina Sizing & Chemical Co.

Stein, Hall & Co.

United Chemical Products Co.

John P. Marston

A. Kilpstein & Co.

H. A. Metz & Co., Inc.

New Brunswick Chemical Co.

Seydel Mfg. Co.

Spartan Sizing Compound Co.

Jaques Wolf & Co.

Wm. C. Robinson & Sons Co.

L. Sonneborn Sons Co.

National Gum & Mica Co.

Masury Young Co.

Hine Bros.

### SOFTENERS—COTTON—

Stein, Hall & Co.

United Chemical Products Corp.

Arabol Mfg. Co.

Bosson & Lane

New Brunswick Chemical Co.

Jaques Wolf & Co.

Wm. C. Robinson & Sons Co.

L. Sonneborn Sons Co.

H. A. Metz & Co., Inc.

The Seydel Mfg. Co.

### STEEL STRUCTURAL—

Wilson Co.

Southern Engineering Co.

Southern Engineering Co.

### STEAM REGULATORS—

SILENT CHAIN DRIVE—

Link-Belt Company

Morse Chain Company

### SOAPS—

United Chemical Products Corp.

Wm. C. Robinson & Son Co.

Dobbins Soap Mfg. Co.

L. Sonneborn Sons, Inc.

Seydel Mfg. Co.

New Brunswick Chemical Co.

A. Kilpstein & Co.

Jaques Wolf & Co.

H. A. Metz & Co., Inc.

### STEAM TRAPS—

Farnsworth Co.

Power Regulator Company

### STRAPPING LEATHER

New York Leather Belting Co.

### SOLDERLESS CONNECTIONS—

Frankel

Westinghouse Electric & Mfg. Co.

### SPINDLES—

Allen Spindle Corporation

The Whitin Machine Works

Easton & Burnham Mach. Co.

Draper Corporation

Southern Spindle & Flyer Co.

### SPINDLE REPAIRERS—

Carolina Steel Roller Shop

### SPINNING RINGS—

Pawtucket Spinning Ring Co.

The Whitin Machine Works

Draper Corporation

Whitinsville Spinning Ring Co.

### SPINDLE TAPE AND BANDING—

American Textile Banding Co.

Barber Manufacturing Co.

### SPOOLS—

Marcodi Fiber Co.

Dana S. Courtney Co.

Ivey Manufacturing Company

Greenville Spool & Mfg. Co.

David Brown Co.

### SPOOLERS—

Easton & Burnham Mach. Co.

Draper Corporation

Saco-Lowell Shops

Whitin Machine Works

### STARCH—

Stein, Hall & Co.

United Chemical Products Corp.

The Seydel Mfg. Co.  
Corn Products Refining Co.  
Keefer Starch Co.  
A. B. Staley Mfg. Co.  
SWEEPERS—  
Clark, H. E. Mfg. Co.

### TALC—

Oliver Quartz Co.

### TANKS—

Walsh & Weldner Co.

Southern Engineering Co.

### TANKS, TUBS, AND VATS—

Tolhurst Machine Works.

### TELEPHONES, AUTOMATIC—

Screw Machine Products Corp.

### TEMPLES—

Draper Corporation

### TESTERS—

(See Yarn Testers)

### TEXTILE MACHINERY SPECIALTIES—

Greenville Textile Supply Co.

Sullivan Hardware Company

Cocker Machine and Foundry Co.

Odell Hardware Co.

### THERMOMETERS—

Power Regulator Company

Tagliabue Mfg. Co.

### WISTERS—

Universal Winding Co.

Fales & Jenks Mach. Co.

Collins Bros.

Draper Corporation

Saco-Lowell Shops

Whitin Machine Works

### THREAD GUIDES—

I. P. O'Connell

### TOILET PAPER—

Dixie Paper & Box Co.

American Paper Mfg. Co.

Dixie Paper & Box Co.

### TOILETS—

General Concrete Cons. Co.

Kaustlin Co.

Jos. A. Vogel Co.

### TOOLS—

Montgomery & Crawford

Walraven Co.

Pasco Tool Co.

### TOWERS—

Southern Engineering Co.

### TRANSMISSION SILENT CHAIN—

Link-Belt Co.

Morse Chain Co.

### TRAPS—

Farnsworth Company

# Starch

ECONOMY and EFFICIENCY are the watch-words to-day. Modern mill men who hold to this motto are discarding ordinary, imperfectly refined starches and selecting those special types best suited for their individual conditions.

Some desire increased weight, all need increased strength and better weaving qualities for the warp.

You know the result you seek.

We know and can provide the proper type of STARCH:

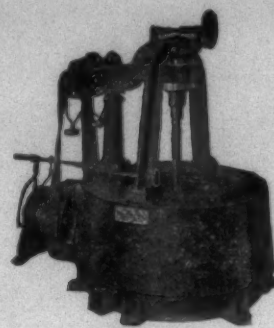
Eagle Finishing  
C. P. Special Famous N.

Corn Products Refining Co.

NEW YORK

Southern Office: GREENVILLE, S. C.

# Starch



SELF-BALANCING BASKETS  
26 to 72 inches.

## Tolhurst EXTRACTORS FOR TEXTILES

SPECIAL CATALOG

Tolhurst Machine Works  
Troy, N. Y.

SOUTHERN REPRESENTATIVE  
FRED H. WHITE, Realty Building  
Charlotte, N. C.

## UNITED PRODUCTS

AMERICAN MADE



PROMPT SHIPMENT

SULPHUR NAVY BLUE  
U. C. P.

The Best  
Money-Value  
Colors

SULPHUR BLACKS  
JET OR BLUE SHADES

VELVETEEN

THE MOST EFFICIENT AND ECONOMICAL BOIL-OFF OR FINISH FOR RAW STOCK  
OR WARPS

### United Chemical Products Corporation

*Importers, Exporters and Manufacturers*

York & Colgate Sts., Jersey City, N. J.

INQUIRIES SOLICITED

Southern Office, Realty Bldg., Charlotte, N. C.

Representatives:

R. T. GRANT, Charlotte, N. C.

B. R. DABBS, Atlanta, Ga.

# DUCK LOOMS

Our Looms Produce the Highest Quality of Fabrics at Lowest Cost

We make automatic looms for all manner of textile fabrics. Plain or fancy, coarse or fine.



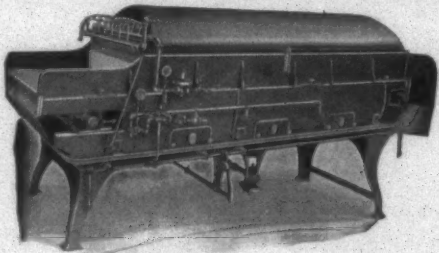
THE STAFFORD COMPANY

READVILLE, MASS.

J. H. MAYES, Southern Agent, American Building CHARLOTTE, N. C.



## The Yarn Conditioning Machine



The practical means for setting twist and effectively preventing kinky filling.  
C. G. SARGENTS SONS CORPORATION  
GRANITEVILLE, MASS.

Southern Agent  
FRED H. WHITE  
Charlotte, N. C.

WE-FU-GO AND SCAIFE

**WATER**

PURIFICATION SYSTEMS  
SOFTENING & FILTRATION  
FOR BOILER FEED AND  
ALL INDUSTRIAL USES

WM. B. SCAIFE & SONS CO. PITTSBURGH, PA.

## Toledo TEXTILE Scales Save TIME and MONEY

Toledo Automatic Scales have been adopted by the most progressive Cotton Mills in the United States, because they quickly earn back the cost in time saving by their speedy operation, and money saved by their extreme accuracy. When in Charlotte drop in our office at 32 W. Trade St. and let us show you our line.

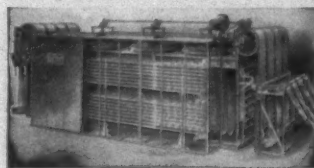
Toledo Scales sell  
by Comparison

**TOLEDO SCALE COMPANY**

F. E. TIPTON, Distributor

32 West Trade St.

CHARLOTTE, N. C.



## Every Textile Drying Need

Proctor Dryers are built in various types and sizes for drying the following:

Cotton, bleached or dyed; cotton lintens; fur; hair; rags, wool; waste, silk; wool, pulled; cotton yarn; mercerized yarn; silk yarn; wool yarn; worsted yarn; canvas, waterproof; cotton cloth; knitted fabrics; shrinking cloth; silk; toweling; tubular goods, woolen; underwear; wool cloth; stockings; half hose; woolen socks; woolen hats.

PROCTOR AND SCHWARTZ, INC.  
Formerly Phila. Textile Mach. Co., Philadelphia  
H. G. MAYER, Realty Building, Charlotte

*Proctor*  
-DRYERS

## Home

"The place we are treated the best and grumble the most." Good treatment comes from those closely related to us. We grumble at the little vexities of life but most of the dissatisfaction comes from the lack of the conveniences of modern home equipment. A trip to the back yard—the location of the privy—in a great many rural settlements—always a disagreeable trip—in the summer the annoying clusters of flies first in the outdoor privy—then on baby's rattle—or on the food. Food we must take into our stomachs and with it all the filth that has been collected by the fly in its usual haunt—the outdoor privy—and deposited on the food. Babies cannot use precaution—child mortality—from fecal-born disease—is astounding—

All this traced to the inconvenience—insanitary—health menacing outdoor privy is certainly one of the causes of grumbling—whether we realize it or not—it is an unreckoned-with factor.

Modern indoor toilets do not necessarily require running water—nor long sewer lines. Sanitary science and invention has enabled Kaustine System Toilets to be installed in many places where water was not available.

Today when Homes should in reality be real Homes—Kaustine Systems can help materially—yet at moderate cost—make them Real.

Catalogue H—a practical treatise on modern sanitation—both with and without running water—is available on request.

**KAUSTINE COMPANY, INC.**

Manufacturers and Sanitation Engineers

Buffalo, N. Y. Toronto, Can. Melbourne, Aus.

Southern Representatives  
J. L. Murphy, Charlotte, N. C.  
McKee & Son, Atlanta, Ga.